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# Vol. III

# TRANSCRIPT OF RECORD

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# Supreme Court of the United States

OCTOBER TERM, 1937

No. 313

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LONE STAR GAS COMPANY, APPELLANT,

vs.

STATE OF TEXAS, THE RAILROAD COMMISSION OF TEXAS, ET AL.

APPEAL FROM THE COURT OF CIVIL APPEALS FOR THE THIRD SUPREME JUDICIAL DISTRICT OF THE STATE OF TEXAS

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### VOL. III

#### INDEX.

Record from District Court of Travis County-Continued.		
Statement of facts of trial on the merits-Continued.	Original	Print
Motion for instructed verdict (omitted in print-		
ing)	~ 2543	
Testimony of Olin Culberson	2545	1604
E. W. Robinson	2560	1610
J. A. Phillips:	2586	1625
Arthur A. Dobson	2766	1710
S. W. Freese	2801	1728
Reporter's certificate (omitted in printing)	2950-A	
Testimony of J. A. Phillips (recalled) (omitted in		
printing)		

Record	from District Court of Travis County-Continued.		
Sta		Original	Print
	Testimony of R. H. Montgomery	2969	1807
	S. W. Freese (recalled)	3008	1827
	F. S. French	3039	1843
	S. W. Freese (recalled)	3055	1851
	J. A. Phillips (recalled)	3098	1876
	S. W. Freese (recalled)	3107	1880
	Olin Culbertson (recalled)	3174	1917
	E. A. Steinberger (recalled)	3196	1921
	R. L. Thornton	3266	1960
	Fred F. Florence	3277	1965
	R. L. Thornton (recalled)	3299	1977
	A. P. Holloway	3300	1978
	Ed, C. Connor (recalled)	3311	1984
	P. McDonald Biddison (recalled)	3347	2002
	Ed. C. Connor (recalled)	3403	2029
	E. F. Schmidt (recalled)	3427	2043
	D. A. Hulcy (recalled)	3447	2054
	S. W. Freese (recalled)	3534	2096
	Reporter's certificate(omitted in printing) Plaintiffs' Exhibits;	3560	
	No. 1-Order of Railroad Commission, dated Sep-	*	
	tember 13, 1933 (omitted in printing)	3562	
	No. 2-Stay order in Cause No. 467, in Equity,		5
	Lone Star Gas Company vs. Railroad Commis-		
	sion of Texas et al., in the District Court of		
	the United States for the Western District of		
	Texas	3564	2109
	No. 3-Stipulation, dated June 11, 1934, by coun-		
	sel for all parties, that the higher forty-cent		
	rate has been in force and effect at all times,		
	and that the thirty-two-cent rate provided for		
	in the order of the Railroad Commission,		
	bearing date of September 13, 1933, has never		
	been at any time put into force or effect by		
	swid defendant, Lone Star Gas Company	3572	2114
	No. 4—Report on Special Investigation of Rec-		
	ords of Lone Star Gas Company Texas Prop-		
	erties, dated March 31, 1934, by J. A. Phillips		
	Company	3577	2115
	No. 5—Report on Special Investigation of Rec-		
	ords of Lone Star Gas Company, dated March 31, 1934, by J. A. Phillips Company	BF08 :	0400
	No. 6—Lone Star Gas Company, Texas Gather-	3593	2126
	ing, Transmission, Compressing and General		
	Property; Reproduction Cost New Appraisal,		
	dated June 15, 1934, by Hawley, Freese and		
	Nichols	3620	2141
	No. 7-Lone Star Gas Company, Texas Gather-	3020	2141
	ing, Transmission, Compressing and General		
	Property, Annual Depreciation, dated June		
	15, 1934, by Hawley, Freese and Nichols	3864	2158

#### INDEX

Record from District Court of Travis County-Continued.		
Statement of facts of trial on the merits-Continued.	**	
Plaintiffs' Exhibits—Continued.	Original	Print
No. 8—Report on Effect of Degree Day Deficien-	-	
cies on Revenue and Earnings for Years End-		
ing December 31, 1933, and March 31, 1934,		
Covering Texas Operations Only for the Lone		
Star Gas Company, by Hawley, Freese and		0.0.00
Nichols	3679	2163
No. 9-Chart Showing Directors and Their Offi-	*	
cial Positions in the Listed Companies		2175
No. 10-Copy of Charter of Lone Star Gas Com-		
pany, dated June, 1909	3699	2176
No. 11-Graph Showing Depreciation Analy-		
sis-Steel Pipe. Historic Replacements and		
Abandonments, by Years, of Lone Star Gas		
Company, and Curve Showing Calculated Re-		100
placements and Abandonments		2182
Defendant's Exhibits:	0.00	
No. 1—Bill of Complaint in Cause No. 467, in		
Equity, Lone Star Gas, Company vs. Railroad		
Commission of Texas et al., in the District		
Court of the United States for the Western		0100
District of Texas		2183
No. 2—Restraining and Stay Order in Cause No.		
467, in Equity (omitted in printing)		
No. 3-Opinion and Order of Railroad Commis-		
sion of Texas in the Matter of an Investiga-		
tion of the City Gate Rate Charged by the		
Lone Star Gas Company, dated September 13,		
1933, in Gas Utilities Docket No. 75 (copy)		*
(omitted in printing)	3842	20
No. 4-Statement Showing Lone Star Gas Com-		
pany's Revenues, Expenses, and Amount		
Available for Return Based on 32¢ Domestic		
Gate Rate—Actual Operating Expenses as Re-		
flected by Company's Books—Depreciation and		
Depletion; Allowances as Calculated by Com-		
mission; Rate Base as Determined by Com-		
mission for Twelve Months Ended December		*
31st, 1932 and Twelve Months Ended June		
30th, 1933, on Public Service Operations	3931	2200
No. 5—Statement Showing Lone Star Gas Com-		
pany's Amount Available for Depreciation		
and Return on Rate Base for Twelve Months		
Ended December 31, 1931, on Public Service		
		2209
Operations		2200
No. 6—Statement Showing Lone Star Gas Com-		
pany's Amount Available for Depreciation		
and Return on Rate Base for Twelve Months		
Ended December 31st, 1932, on Public Service		0010
Operations	3939	2212

Record from District Court of Travis County-Continued.		
Statement of facts of trial on the merits-Continued.		
Defendant's Exhibits-Continued.	Original	Print
No. 7-Statement Showing Lone Star Gas Com-		
pany's Amount Available for Depreciation		
and Return on Rate Base for Twelve Months	14.	
Ended June 30th, 1933, on Public Service Op-		
erations (omitted in printing)	3944	
No. 8-Statement Showing Lone Star Gas Com-		
pany's Amount Available for Depreciation		
and Return on Rate Base for Twelve Months	4	
Ended December 31st, 1933, on Public Service		
Operations '	3949	2215
No. 9—Statement Showing Lone Star Gas Com-		2210
pany's Amount Available for Depreciation		
and Return on Rate Base for Twelve Months		
Ended March 31st, 1934, on Public Service		
Operations	3954	2218
No. 10—Statement Showing Lone Star Gas Com-	0001	mark 10
pany's Amount Available for Depreciation		
and Return on Rate Base for Twelve Months		
Ended April 30th, 1934, on Public Service Op-		
erations'	3959	10001
	0000	4441
No. 11—Statement Showing Lone Star Gas Com-		
pany's Detail of Operating Expense for		
Twelve Months Ended: December 31st, 1931;		
December 31st, 1932; June 30th, 1933; Decem-	0001	
ber 31st, 1933, and March 31st, 1934	3964	2224
No. 12—Statement Showing Lone Star Gas Com-		
pany's Detail of Operating Expense for	adaa	
Twelve Months Ended April 30th, 1934	3968	2229
No. 13—Accounting Schedules of Lone Star Gas		
. Company, Based on Findings by Railroad		
Commission of Texas and Set Out in Their		
Opinion and Order, dated September 13, 1933,		
on Public Service Operations	3972	2232

#### Cross-Examination.

# Questions by Mr. Fitzhugh:

- Q. Refer to your summary sheet in your exhibit, Mr. Hulcy, being Exhibit Number 46, that appears on page 2, does it not?
  - A. That is one of the summary sheets, yes.
- Q. This particular summary sheet is for the twelve months ended December 31, 1933?
  - A. It is.
- Q. Now, where you have "D" Operations, those refer to the West Texas gas operations, do they not?
- A. Largely the West Texas gas operations—not altogether that, because there are some—there is some gas other than West Texas which enters into "D"; for instance, the Petrolia Field Operations are included in "D"; but that does cover the gas produced, purchased, transported and sold wholly within the State of Texas.
- Q. Yes, sir; and the "E" Operations are the operations from gas coming from the Texas Panhandle and the Oklahoma fields?
  - A. That is correct.
- Q. Now, at the bottom of the page you show on the combined property; 7.81 per cent as the amount available for depreciation and return on the combined property; 8.82 per cent for the wholly within Texas operation; and 5.98 [fol. 2524] per cent as attributable to the Oklahoma and Texas Panhandle operations?
  - A. That is correct.
- Q. Now, after deducting the two per cent allowed by the Railroad Commission of Texas for depreciation, you get for the wholly within Texas Operations, I believe you say, 6.82 per cent, and for the Texas Panhandle and Oklahoma Operations 3.98 per cent?
  - A. That is correct.
- [fol. 2525] Q. The return, therefore, shows to be almost fifty per cent or almost sixty per cent greater on the Texas operations than on the Texas Panhandle and Oklahoma operations?
  - A. Yes, sir, something in excess of that.
- Q. Now, turning to page 3, where you used the 32 cent gate rate as provided in the Commission's order and where

the same sort of percentages are figured to give effect to that 32 cent domestic gate rate, after figuring in the two per cent allowance for depreciation, you get 4.65 per cent for the wholly within Texas operations and 2.88 per cent for the Texas Panhandle and Oklahoma operations, do you not?

- A. That is 2.48.
- Q. Yes, that is correct.
- A. That is correct.
- Q. So that, as shown by this sheet, after giving effect to the 32 cent rate, the wholly within Texas operations would be approximately twice as profitable, so far as rate of return is concerned, as the Oklahoma and Texas Panhandle operations.
  - A. That is correct.
- Q. On page 4, after making the same sort of computations as to the amount available for depreciation and return and deducting the two per cent depreciation allowed by the Railroad Commission, the wholly within Texas operations work out about twice as profitable as the Texas Panhandle and Oklahoma operations?

A. On a percentage basis; yes, sir.

[fol. 2526] Q. And on page 5, following through the same sort of method, the wholly within Texas operations-show themselves to be about three times as profitable?

A. That is correct, approximately.

Q. Now, doesn't that show, Mr. Hulcy, that the Railroad Commission was exceedingly liberal to the company in considering the property as a whole rather than making a

segregation of the Texas property?

A. Well, I don't know, Mr. Fitzhugh, about their liberality in connection with any part of the order, and this exhibit does show on pages 2 to 5, inclusive, that the amount available for depreciation and return, when divided between operations wholly within the State of Texas and the operations other than those wholly within the State of Texas, that the larger per cent is available for the wholly within Texas operations.

Q. And so by including the not so profitable operations of business not wholly done in Texas the over-all rate of

return was considerably cut down, wasn't it?

A. Yes, the over-all return, of course, is less and is shown to be less than the amount applicable to the operations wholly within the State of Texas.

- Q. And the inclusion of all operations of the company would serve to cut down the percentage shown for the whole property when compared with the purely Texas operations for the amount available for return and depreciation and return, would it not?

  [fol. 2527] A. That is quite true.
- Q. Now, you have not shown in this exhibit anything except the year 1933, have you?

A. That is correct; yes, sir.

- Q. Isn't it a fact, Mr. Hulcy, that the year 1933 from a temperature standpoint was about the warmest year on record?
- A. No; I would not say, Mr. Fitzhugh, that the temperatures were such that it was the warmest year. It was comparatively speaking, a warm year. 1921 was also quite a warm year, and they are rather spotted.

Q. Before the Railroad Commission, at the hearing had before that body, you submitted the degree days of de-

ficiency for 1931 and 1932, did you not?

A. At your request, I believe I did, Mr. Fitzhugh.

Q. Yes, sir. Now, the Railroad Commission took into consideration in its order, did it not, the temperatures as

shown for those years?

- A. Well, I don't know of anything the Commission took [fol. 2528] into consideration with reference to those temperatures. There might have been some reference to them, Mr. Fitzhugh, but I don't know of any corrections that the Commission made for it.
  - Q. Tney didn't make any corrections on it?

A. I don't think they did.

Q. But regarded the years 1931 and 1932 as average years, so far as temperature is concerned?

A. There was no adjustment made, as I recall now, due

to temperature.

Q. Now, in these exhibits, Mr. Hulcy, where you predict or try to work out what sales would have been if the 32 cent rate had been put into effect, have you taken into consideration the increased sales of gas that would undoubtedly take place at lower prices?

A. Mr. Fitzhugh, I don't know anything about that, that any increased sales would take effect. You are contem-

plating, of course, that the amount of reduction would be passed on to the customer. Is that what you mean?

Q. Yes.

A. Well, I don't know anything about that.

- Q. Well, now if the 32 cent rate were to be actually put in instead of the rate the company has been charging at the city gate, don't you think there would be increased sales of gas?
- A. Again you are giving effect to the reduction being passed on to the customer?

  [fol. 2529] Q. Yes, sir.
- A. Mr. Fitzhugh, I don't know that there would at all. When you furnish a gas service—and that is what I am talking about now—to the domestic customer for his total requirement—that is, when he heats his house properly, as he should—then there is no other business to get from that customer; he has gas stoves, he has a range, and is going to use just as much—so much gas to cook a meal, and if you reduce the price from 75 down to 69 I don't think it is going to make any difference in the amount of gas he uses for those purposes. That is my personal opinion.

Q. Mr. Hulcy, you are familiar with the fact that the company's customers, or, rather, the domestic consumers served by the whole system, have dropped from about 230,000 to

about 200,000?

A. I would say, generally speaking, I don't believe they have dropped that much, Mr. Fitzhugh. That is a very sizable decline. I don't think they have dropped that much.

Q. Well, how much has the drop been?

A. I might be able to tell you. (Witness inspects data.) According to the figures that I have, the decline in domestic customers served by the Lone Star Gas Company—that is, through the Lone Star Gas System—has declined in round figures somewhere between seven and eight thousand.

Q. For that year?

A. That is, 1930 and 1931, compared with 1933.

[fol. 2530] Q. What is the number of consumers now?

- A. The number of domestic consumers as I have them for 1933 is 202,472.
- Q. Now, Mr. Connor's exhibit shows that the average that he considered in finding his going value was 230,000; so that that would show that the average domestic consumers had fallen off about 28,000?

A. The difference between 202,000 and 230,000 is about 28,000.

Mr. Griffith: Is the figure of 202,000 for active consumers?

A. Average active consumers; that is the average for the vear.

Q. You have not, in any of these sheets, pages 2 to 5, in-

clusive, cut out management fees, have you?

A. No, sir; I have not. Those are expenses as reflected by the company's books and which were included in the exhibit which was sponsored by me in this hearing before.

Q. And all the Federal income taxes as shown on these sheets are the computed taxes and not the actual taxes?

A. That is correct.

Q. Did you take into account in figuring the Federal income taxes any deduction that you would be entitled to for interest payments?

A. No, sir; I did not.

Q. Now, on page 29 of your exhibit you show the dollars applicable to D operations and also the dollars applicable to E operations. What are the dollar amounts applicable to [fol. 2531] the A operations?

A. I don't have any A operations included in my report,

Mr. Fitzhugh, not at any place.

Q. Well, you have the areas separated into three areas?

A. Into three areas, yes, sir, but not operations. Q. Well, how did you use those areas, A, B and C?

A. I used them, Mr. Fitzhugh, in this way: Area A is the area in which business that is conducted wholly within the State of Texas, we will say, covers. Area B is that area where operations of the Texas Panhandle and/or Oklahoma are involved. Area C was the mixture, or where the facilities and sales were joint and concurrent. D operations show the business and property from sales and purchases of gas that is wholly within the State of Texas, and likewise the operations cover sales and purchases of gas, property and operating expenses other than wholly within the State of Texas.

Q. Well, now, on page 30, in finding the operations so far as your operating expenses are concerned you do make use

of the three areas?

A. Yes, sir; I do. I might explain, Mr. Fitzhugh, that I could have put this in Area B and Area A just as well and then transferred the operations.

Q. Yet you show that by the information on page 30?

A. No, sir. Page 30 is a detail of classified operating expenses. However, I assure you that it would not have [fol. 2532] changed the figure one penny had I spread it on page 30.

Q. Well, how did you find on page 29 the amount appli-

cable to Doperations?

- A. Mr. Fitzhugh, page 29 shows the gas purchased in the Petrolia field in the amount of \$1,161.72. I think it has been clearly stated that the Petrolia field gas does not flow north or northwesterly into the H. system or the A System. Therefore, the Petrolia field gas must have been wholly within the State of Texas. Gas purchased in West Texas is in the amount of \$969,079.16. It has been testified that that gas sold in the West Texas area and in the Southern Texas area goes on in an easterly direction, some to Fort Worth and Dallas and on to Cooper, Sulphur Springs, Athens, and other East Texas towns, and part of it goes into the E System and is sold at towns and cities as far east as Paris and Clarksville. However, some portion of the West Texas g-s sold through the E System was delivered within the State of Oklahoma and sold to the towns of Caddo, Achilee, Durant and Hugo. Therefore, to the extent that Oklahoma gas was sold at those particular towns it was necessary to make a deduction in order that our operations and statements be kept to reflect the business done wholly within the State of Texas, and therefore I have made a deduction from the gas purchased in West Texas in the amount of \$8,212.20, to cover the cost of the gas which was sold in the State of Oklahoma, and that amount deducted from the total purchases gives \$962,-[fol. 2533] 028.68 as the gas purchased applicable to D operations.
- Q. Now, on page 16, Mr. Hulcy, where is shown the statement of gas sales to the Community Natural Gas Company for the twelve months ended December 31, 1933, on the B System?

A. Yes, sir.

Q. How is that amount segregated for the domestic sales on the B System found?

A. That is found, Mr. Fitzhugh, from the records of Lone Star Gas Company covering the billings to the Community Natural Gas Company for domestic gas. Those are actual figures. [fol. 2534] Q. Well, how did you find that as between the D and E operations?

A. Well now, you want me to transfer back over to the pages where those segregations are made?

Q. Yes, show what pages you worked from.

A. All right. The detailed information on page 16 is transferred to page 12. Thereon it will be noted that the total volume of gas, that is 46,593,000 cubic feet which was sold for \$18,109.51 is shown on page 12, all of that gas being applicable to area C, which is a mixture of the West Texas gas and the Shamrock and/or Oklahoma gas. Then it was necessary to make an allocation of those sales into D operations and E operations. As stated before, and which exhibit has been introduced, Mr. Connor and Mr. Schmidt made a detailed study covering the allocations of gas sold in that particular line, and by referring to page 44 of Exhibit 45, it will be noted that at the bottom of such page 44, which covers B and taps, a statement of total gas sales is shown. Also, this statement shows that 22,986,000 cubic feet of West Texas gas was sold for domestic purposes. Also that 8,254,-000 cubic feet of West Texas gas was sold on B 16 inch and taps for industrial purposes, and that 133,061,000 cubic feet of Texas Panhandle and/or Oklahoma gas was sold on B 16 inch and taps for domestic purposes and 39,381,000 cubic feet of the same gas was sold for industrial purposes. That is a total domestic sale of 156,047,000 cubic feet. The west Texas gas was 14.70 per cent of the total, and the Texas Panhandle [fol. 2535] and/or Oklahoma gas was 85.30 per cent of the total domestic. Therefore I used 14.70 per cent of the total domestic sales as being applicable to D operations and naturally the remainder, or 85.30 per cent as being applicable to E operations. The same thing was done for the industrial gas and the average rates for industrial gas received was applied; the forty cent rate of course was applied to the domestic gas.

Q. Now then, as shown on page 12, Mr. Hulcy, your wholly. Texas operations are the ones that you show as D operations, and you show a total sales of domestic and industrial

gas of 5,232,118,000 cubic feet. Is that correct?

A. That is correct.

Q. For which amount of gas you received, \$1,522,639.62?

A. That is correct.

Q. Now, dividing the number of dollars by the thousands of cubic feet, what price per thousand cubic feet do you get?

A. The approximate price is 29.1 cents per thousand cubic

feet.

- Q. Now, that is for wholly Texas operations, isn't it?
- A. That is, to the Community Natural Gas Company.

Q. Yes.

A. That is correct.

Q. Now then, take the operations which you designate as the E operations. There you show the sales for domestic and industrial gas to be 2,964,373,000 cubic feet, for which you received \$554,016.92?

A. Yes.

Q. What does the price per thousand cubic feet turn out [fol. 2536] to be in that case?

A. About 18.4 cents per thousand cubic feet.

- Q. Now that 18.4 cents on the E operations compares with 29.1 cents per thousand cubic feet on the D operations, doesn't it?
- A. That is correct. However, they are not comparable at all, Mr. Fitzhugh.

Q. Sir?

A. They are not comparable for this reason: If you will refer to the A system, as shown on page 12, you will notice a large volume of industrial gas sold on that line, in fact, there was 1,799 million cubic feet which was sold for \$174,000.00. It happens that a large amount of that is made up of the sales to West Texas Utilities Company at their Lake Pauline plant, which takes a large volume of gas, so that the average rate from the E and D operations should not be compared without taking that into consideration.

Q. Well now, that is just on the Community Natural Gas

Company, isn't it?

A. Yes, that is the Community Natural Gas Company.

Q. Don't you show a total for all companies?

A. Yes, I do.

Q. What sheet does that appear on?

A. We can get that from the summary; either of the summaries, Mr. Fitzhugh. That is shown on page 8.

Q. Page 87

A. The grand total, yes, divided between the D operations [fol. 2537] and the E operations; the last four columns give that information.

Q. That includes all companies, does it?

A. Yes, that includes everything, divided between the two operations.

Q. Now what is the average sales price of gas per thousand cubic feet you show for D operations, as shown on that sheet?

A. The average price is about 24.9 cents per thousand cubic feet for the D operations.

Q. And what is it for the E operations.

A. The average price for the E operations is 24.8 cents per thousand cubic feet. They are almost the same. It happens that there are other large industrial sales in other parts of the system where over-all they will about balance out, but the Community Natural Gas Company alone, of course, does have a big difference.

Q. What was the percentage of the total revenues that you allocated to the D operations and to the E operations.

A. The percentage of the total?

Q. Yes.

A. In round figures, Mr. Fitzhugh, 73 per cent to the D operations and 27 per cent to the E operations.

Q. What are the percentages that you worked out for the D operations and the E operations for operating expenses?

A. I will have to check that for you. It is about 66 per cent and 34 per cent; that is, the expenses are about that for the D & E operations and they are about six or seven per cent lower for the D operations than the sales.

[fol. 2538] Q. That is, while you figure that 73 per cent of the revenues will be attributable to the D operations, you only use 66 per cent of the expenses for the same operations?

A. That is correct.

Q. Now, what is the percentage that you worked out for the D operations and the E operations, as to the property used in each?

A. 64.22 and 35.78 per cent; that is for the D and E operations respectively.

Q. In working out the revenues and expenses that belonged to the C area, how did you segregate those between D and E operations?

A. Those segregations were made upon the information included in the Schmidt-Connor report, with reference to the specific systems.

- Q. Do you know how the percentages work out over-all, on the C area?
- . A. No, sir, I do not know just how it would work out over-all, I have it only by individual systems.

Q. Do you think you could approximate it?

A. No, I wouldn't attempt to approximate that, unless you want me to take these figures down and work it out.

Q. How long would it take you?

A. About fifteen minutes.

Q. Well, don't do it then.

A. I thought as long as I handled it by individual systems that would take care of everything.

[fol. 2539] Q. Do you know how the split was made as to the C area, as between D and E operations, as to the property?

- A. Yes, I do. Well, of course understand, Mr. Fitzhugh, that the expenses are not given over to the C area altogether; that is handled in the Fort Worth operating district and the Dallas operating district, and so it is not on a basis of the C system itself. Now it happens that that was given effect to in the Fort Worth division. That the C line and taps was only a part of the mixed area. We also have the B 16 inch line and taps in that same operating district and the J-2 line and taps in that same operating district; and as I said, the expenses are not kept by lines but by districts, and the allocations were made out of the districts to the D operations and the E operations on the basis of the miles of three inch equivalent pipe included in each of those systems.
- Q. You would not be able to give, then, the over-all percentages, would you?
  - A. Not on the operating expenses.
  - Q. Would you on the property split?
  - A. Do you mean out of the C area?
- Q. Out of the C area as allocated to D operations and E operations.
- A. Yes. Now understand I can give you that which is allocated out of the C area for operating expenses, but not by a particular system, such as the C system. I do that out of the operating districts.
- Q. Well can you give the per cents overall?

  [fol. 2540] A, I will have to do that in the same manner I took off the property. I will have to sum them all up.

That can be done but it will take a little time for me to do it. However, this particular Fort Worth district of which we were just talking about, out of the total expense of \$38,496.63 for that district there is a total of approximately \$6400.00 applicable to D operations, and the remainder of about \$32,000.00 being applicable to the E operations. Of course that is calculated out on the several lines involved in the district.

- Q. Now on page 40, Mr. Hulcy, under general property, you have undistributed intangible property of \$200,000?
  - A. Yes.
  - Q. Which comes from area A?
  - A. Yes.
  - Q. What is that \$200,000.00?

A. That is the value placed on a contract executed by and between Lone Star Gas Company and Texas Public. Utilities Company, operating in the West Texas area, and taking gas at that point and being supplied wholly with West Texas gas. That was in connection with purchase of properties and that was the value placed on the contract. It is a contract for a long period of time and covering sizable volumes of gas.

Q. Well, doesn't that represent a capitalization of future profits?

A. No sir, it does not. The Lone Star Gas Company paid in round figures One Million Dollars for the property and also in consideration of the signing of this contract. Of that \$1,000,000 which was paid or agreed to be paid, ap-[fols. 2541-2544] proximately \$800,000.00 thereof was allocated to other physical property, and the \$200,000.00 to the contract, the sums of the two making the actual amount paid by the company. And so there is not any capitalization of earnings or anything else like that in connection with it, but it is an actual cost to the company.

Q. Why didn't you make a separation or segregation, Mr. Hulcy, as between the gas produced in Texas and the gas produced in Oklahoma?

A. Well, I didn't think that had anything to do with it, Mr. Fitzhugh, as I saw it.

Q. Who did you advise with on that matter?

A. Well, the whole thing was talked over. I have talked with a lot of people about this thing.

- Q. Well, this exhibit as it now is or as the segregation was made, was done largely on the advice of your lawyers, wasn't it?
- A. Well, I don't know that it was done so largely on the advice of the lawyers. This just entered into it. At first, my idea was, the way I started off, that I would make it on interstate and intrastate, and that is just my idea or opinion of what is interstate and what is intrastate.

Q. That's all.

Mr. Griffith: That is all. Now, if the Court please, the Defendant Rests.

### [fol. 2545] Plaintiffs' Rebuttal Evidence.

OLIN CULBERSON, a witness for plaintiffs, having been duly sworn, testified as follows:

Direct examination.

## Questions by Mr. Fitzhugh:

Q. State your name, please, sir.

A. Olin Culberson.

Q. Where do you live, Mr. Culberson?

A. In Austin.

Q. What is your business?

A. I am Director of the Gas Utilities Division of the Railroad Commission of Texas.

Q. Have you been identified with the Railroad Commission in some capacity for the last two years?

A. Yes, sir, since September, 1932.

Q. You are the man, are you not, Mr. Culberson, who was detailed by the Railroad Commission to hold the hearing of the Lone Star Gas Company matter at Fort Worth?

A. Yes, sir.

Q. As Director of the Gas Utilities Division of the Rail-[fol. 2546] road Commission of Texas have you had custody of the transcript of testimony adduced and exhibits introduced at that hearing?

A. Yes, sir, I have.

Q. Have you brought those exhibits and the record, as made at that hearing, to court this morning?

A. Yes, sir.

- Q. Now, the transcript of testimony starts with an i-dex and runs through some eighty-nine volumes, comprising a total number of pages of about 11,229 pages,—is that correct?
  - A. 11,232.
- Q. Now, you have prepared, have you not, Mr. Culberson, a list of the exhibits which were introduced, both on the part of the State and on the part of the Lone Star Gas Company at the hearing?

A. Yes, sir.

Q. Will you kindly read the list of these exhibits?

A. Exhibit 1, by D. A. Hulcy, Public Service Property and Amount Available for Depreciation and Return, for the twelve months ended December 31, 1931. is by the same witness, for the period ended April 30, 1932. No. 3, by the same witness, the same exhibit, for period ended June 30, 1932. Exhibit 4, same witness and same type of exhibit, for the period ended July 31, 1932. Exhibit 5, [fol. 2547] the same witness, and the same character of exhibit, for the period ended August 31, 1932. Exhibit 6. by Mr. E. A. Steinberger and Mr. Ed. C. Connor, Appraisal Co of Reproduction New and Present Values as of January 1, 1932, Public Service Plant, Property and Business, which is the black volumes—I to IX, inclusive. Exhibit 7. by E. A. Steinberger, Leaseholds-Undeveloped. A Determination of Present Values. Exhibit 8, by Mr. J. H. Dunn and Mr. — I have got it P. E.-

Mr. Fitzhugh: F. E. Kendrick.

A. F. E. Kendrick, Report and Findings of Gas Reserves, January 1, 1932. Exhibit 9, by D. A. Hulcy, Appraisal of Gas Reserves, for the period ended January 1, 1932. Exhibit 10, by Ed. C. Connor, Chart showing Growth of Properties and Business Under Basis of Reproduction. Exhibit 11 was an exhibit introduced by Mr. Harrison Smith, Engineer for Sanderson & Porter, Reproduction Cost of Physical Properties in Public Service as of January 1, 1932. That is the brown bound volumes, Volumes I to V, inclusive. Exhibit 12, by Harrison Smith, General Costs. Exhibit 13, Harrison Smith's exhibit on Going Value. Exhibit [fol. 2548] 14, by Harrison Smith, Inspection of condition of Physical Property as of January 1, 1932. Exhibit 15 was a map that was introduced by—according to the record, by Mr. Smith as to the spot inspections that he made; and,

as I recall it, there was just one copy of that filed, and that is not among these exhibits. It was introduced by Mr. Smith for the purpose of identifying the locations where he made pipe inspections. As I recall it, there was only one. I don't have it. If I did have it, it has been taken away.

Mr. Stout: Was it similar to the map back there?

The Witness: Sir?

Mr. Stout: Was that just a map like that one back there?

The Witness: Yes, with the exception that they do not have indicated on this map where he had made these various inspections of the pipe.

Mr. Stout: Yes, sir, but I understood it was similar to

the map just back of you?

· The Witness: Yes, sir.

Mr. Griffith: That is what it was, Judge Stout.

A. Exhibit 16, by Harrison Smith,-Summaries of Reproduction Cost, Reproduction Cost Less Depreciation as [fol. 2549] of January 1, 1932. Exhibit 17 was by Mr. P. McDonald Biddison, Report on Condition of Property as of January 1, 1932. Exhibit 18, by Ed. C. Connor-Depreciation Analysis, and Determination of Annual Reserve Accruals for Various Items of Depreciable Property. Exhibit 19, by Mr. Connor, Depreciation Analysis, Replacements, Removals and Abandonments of Steel Pipe, December 31, 1931. Exhibit 20, by Mr. Connor-Depreciation Analysis, Relation of Failures of Original Units and Replacements of Original Units and Replacements of Replacements. Exhibit 21, by Mr. Connor-Depreciation Analysis-Application of Annual Reserve Rates to Reproduction Cost New of Physical Properties. Exhibit 22, was by Mr. Connor—Current Quotations on Bonds and Other Senior Securities of Natural Gas, Manufactured Gas, and Electric Utilities. And then there was a duplication of numbers; there was another exhibit 22, by Mr. Hulcy, numbered the same as Mr. Connor's that dealt with the Degree Day Deficiency Data for the Years 1931 and 1932, for the area under examination. Exhibit 23 was an exhibit by Mr. Hulcy-Calculation of Depreciation on Autos and Drill Tools charged to Expense, for the twelve months ending December 31, 1931. Exhibit 24 was by Mr. Hulcy-A Public Service Property Statement showing the Prop-

erty Account and Net Additions to Property Account by [fol. 2550] Years. Exhibit 25, by Mr. Hulcy—Public Service Property and Amount Available for Depreciation and Return, for the twelve months ended December 31, 1932. Exhibit 26, by Mr. J. H. Phillips, A Report on Special Investigation of the Records of the Lone Star Gas Company for the time ended December 31, 1932. Exhibit 27, by Hawley, Freese & Nichols, introduced by Mr. S. W. Freesea Report on the Gas Leaseholds of the Lone Star Gas Company as of December 31, 1931. Exhibit 28, by Mr. Freese-Report on Reproduction Cost New Appraisal of Lone Star Gas Company, as of December 31, 1931. Exhibit 29, by Mr. Freese-a Report on Business, Rate Base, and Annual Requirement for Depreciation, Obsolesence, Replacements and Amortization of Lone Star Gas Company, as of December 31, 1931. Exhibit 30, by Mr. Freese, Miscellaneous Studies of the Lone Star Gas Company Investigation. Exhibit 31, introduced by Mr. Edgar G. Hill, of the firm of Ford, Bacon & Davis, Engineers, dealing with Excavation Cost. Exhibit 32, by Mr. Ed. Connor-Graphic Comparisons of Mortality Curves. Exhibit 33, by Mr. Hulcy, on Comparative Degree Days Deficiency Data, for the Dallas area, for the years 1921 to 1933. Exhibit 34, by Mr. Hulcy. [fol. 2551] Public Service Property and Amount Available for Depreciation and Return, for the twelve months ended April 30, 1933. Exhibit 35, by Mr. Hulcy, Lone Star Group Companies' Statement of Pipe Purchases through Pittsburgh Office. And Exhibit 36, by S. W. Freese of Hawley, Freese & Nichols—Corrections to Exhibits Nos. 27, 28, and 29, of the Lone Star Gas Company Investigation, introduced by him while testifying as a witness.

Q. Now, Mr. Culberson, each one of the exhibits which you have just read is here on this table, with the exception of Exhibit 15—the map introduced by Mr. Harrison Smith, showing the spots at which Mr. Smith made his inspec-

tions?

A. Yes, sir.

Q. Now, I believe you stated that you were the one commissioned by the Railroad Commission to conduct this hearing?

A. Yes, sir; I was acting in the capacity of Chief Examiner.

Q. That was before you became the head of the Gas Utilities Division?

A. Yes, sir.

Q. What is the general practice of the Railroad Commission where a long, extended hearing is in prospect in a [fol. 2552] matter of this sort, in the matter of turning the case over to a Commissioner or an Examiner to hear it?

A. It is the practice that an Examiner be appointed, who takes charge of the hearing and conducts the hearing; and when it has been finally concluded, to submit the data adduced at the hearing to the Commissioners for their consideration.

Q. That is along the same general lines that the hearings of the Interstate Commerce Commission are conducted, is it not?

A. Yes, sir; they follow the same procedure.

Q. And the statutes of the State of Texas allow such procedure, do they not?

A. Yes, sir, they do.

Q. Now, after this hearing was completed—Incidentally, How long did it take to hear this case?

A. We started in November, and recessed in the latter part of December until about the sixth or ninth of February, and then, with the exception of—oh, probably a few recesses of a day or more each, we ran until the 29th day of June, I believe it was—yes, the 29th day of June.

Q. So that the hearing consumed the better part of eight months?

A. Yes, sir.

[fol. 2553] Q. After the hearing was completed, Mr. Culberson, how long did it take the Railroad Commission to study through the data taken at the hearing, and to write its order?

A. Well, I believe the order was promulgated in September, and it was from practically the—you might say, the first day of July, because we got daily copy, and the record was available from practically the first day of July, I think, until about the ninth day of September—I think is the date of that order.

Q. The thirteenth day of September.

A. The thirteenth of September—whatever the day was it was promulgated.

Q. So it took practically from the first day of July to the thirteenth of September to make their findings?

A. Yes, sir.

Q. You know, do you not, Mr. Culberson, as a matter of fact, as a member of the Gas Utilities Department, that practically the entire personnel of that Department worked on preparing the data for the Commissioners' study?

A. Yes, sir.

[fol. 2554] Mr. Fitzhugh: We now want to introduce, Your Honor, the transcript of testimony, composed of an Index and eighty-nine volumes, comprising about 11,230 pages of question and answer testimony, and the exhibits that were introduced at the Railroad Commission's hearing as identified by Mr. Culbertson for the purpose of showing that the order of the Railroad Commission was not unjust and unreasonable, and that it was not arbitrary and a

jumped up proposition, and not confiscatory.

Mr. Shannon: We object to both the testimony and exhibits for the following reasons: Plaintiffs allege that this suit is in the nature of an appeal from the order of the Railroad Commission taken pursuant to the provisions of Article 6059 of the Revised Statutes of 1925. As such this is a trial de novo, in which the defendants, both on the issue of confiscation and the issue of unreasonableness of the order of the Railroad Commission are entitled to the independent judgment of the Court and jury on testimony adduced at this hearing relative to the question of whether or not at this time the order of the Railroad Commission does operate to confiscate its property and is unreasonable. The record made before the Railroad Commission is irrelevant and immaterial to the inquiry and the issues raised in this case by the pleadings, and is only admissable in any event under the decisions in this State for impeachment purposes, and only when there is a specific reference to a [fols. 2555-2557] specific portion of the record, to impeach particular testimony adduced on this trial. That has been held, first, in the Hillsboro Case, upon which these gentlemen rely for their statement that this purports to be an appeal under Article 6059; and which has been more recently held by the Austin Court of Civil Appeals, which decision I do not have with me, but which I can furnish to Your Honor at noon. The testimony in this case shows that labor prices have changed; that material prices have changed, since the opinion and order of the Railroad Commission was promulgated; and, therefore, at the present time, testimony taken before the Commission would not have any relevancy and would have no bearing on the question of confiscation, or on the question of the reasonableness or unreasonableness of the order at this time. We object to it, therefore, because it serves no purpose except to encumber this record, because it is not relevant to any issue in this case, because it is not admissable in any event except solely for impeachment purposes, and for which purpose it is not now introduced.

[fol. 2558] Mr. Stout: Well, we offer it for the purposes, as stated.

[fol. 2559] The Court: I think you will be better off with it in your bill of exceptions, Mr. Stout, than to have it in here. I am going to exclude it, on the pleadings.

Mr. Stout: Note our exception.

The Court: And I will say this, Mr. Stout, that if it becomes necessary to appeal the case, you may have your bill of exceptions include this testimony before the Railroad Commission and the exhibits in connection therewith, and send it all up as a part of your bill.

Mr. Stout: In other words, our bill would include the

whole record as made before the Commission.

The Court: Yes, sir. You have introduced a list of the exhibits introduced at that hearing, and your exhibits can follow right after as part of your bill. Now, all this material that has been excluded, may I suggest that you remove it from the Reporter's table, so that we may have more room. Of course, Mr. Culbertson's testimony, and the list of exhibits which he read off as having been introduced before the hearing of the Railroad Commission, remain in; it is the testimony and the exhibits themselves which are excluded.

[fol. 2560] E. W. Robinson, a witness for the State, having been duly sworn, testified as follows:

Direct examination.

Questions by Mr. Fitzhugh:

Q. What is your name, please?

A. E. W. Robinson.

- Q. Where do you live?
- A. San Antonio.
- Q. What business are you engaged in at the present time?
- A. Construction.
- Q. How long have you been in the construction business?
- A. A little over 21 years.
- Q. Are you identified with any company or partnership?
- A. Yes, sir.
- Q. What is the name of your company?
- A. McKenzie Construction Company.
- Q. Where is their principal place of business?
- A. San Antonio.
- [fol. 2561] Q. What is your position with that company?
  - A. Vice-president.
- Q. How long did you say you had been identified with this company?
  - A. A little over 21 years.
- Q. The McKenzie Construction Company does general construction work, does it not?
  - A. Yes, sir.
- Q. In the work undertaken by the McKenzie Construction Company, has it in the past done considerable amounts of excavation work?
  - A. I think "yes" would be the proper answer.
- Q. What are some of the larger construction jobs which the McKenzie Construction Company has undertaken in the last five years?
- A. The Alamo National Bank in San Antonio; the Cadiz Street Viaduct in Dallas; we were associated with two other contractors in the construction of two dams, one near Fort Worth, and one near Bridgeport.
  - Q. How big jobs were those dams?
  - A. The total contract was about four and a half million.
  - Q. Any other work?
- A. I am not sure whether the Smith-Young Tower in San Antonio—I believe it was constructed longer ago than five years. We did two sewer jobs in Austin here, I think, [fol. 2562] within the five-year period. We did the piers for the T. & P. Railroad bridge across the Trinity River in Dallas. Those are the principal ones that I can think of within the last five years.
  - Q. Have you built any buildings here in Austin?
- A. Two buildings for the University—Garrison Hall and the Littlefield Dormitory.

- Q. Now, all of these construction jobs have had excavation work in connection with them?
  - A. Yes, sir; I think every one of them.
- Q. In connection with these excavation jobs you have done numerous excavation jobs for sewer lines and water lines?
  - A. Yes, sir.

Q. What are some of the larger jobs in that sort of work

that you have been identified with?

A. We did about 150 miles of sewer work in Fort Worth. We have done several sewer jobs in Dallas, two sewer jobs in Austin, one in Houston, and several in San Antonio; water filtration plant and water works in Fort Worth; sewer system at Breckenridge, Texas. Those are the principal ones I can recall.

Q. Now, on these various construction jobs you have mentioned, were you identified with the work in any way as to

estimating of costs?

A. Yes, sir.

[fol. 2563] Q. Just what was your duty in connection with this work?

- A. In most of this work I did the estimating and prepared the bids.
  - Q. Did that involve an estimate of all excavating costs?

A. Yes, sir, in most cases.

- Q. On these construction jobs have you kept fairly accurate cost records to find out the cost of doing the various kinds of excavation?
  - A. Yes, sir.
- Q. Does your company now own and operate, when your construction work requires their use, ditching machines?

A. Yes, sir.

Q. Are you familiar with the costs that are incurred in the work of ditching machines and back-fillers?

A. Somewhat, yes, sir.

- Q. Are you in general familiar with the Lone Star Gas System in the States of Texas and Oklahoma?
- A. I know nothing about Oklahoma. I have been over part of the lines in Texas.

Q. What part of the system have you been over?

A. Well, I made a trip with Mr. Nichols. We started out of Fort Worth and went up towards Rhome, up through Bridgeport, Wichita Falls, Petrolia; I believe we went up to Electra and we came down to Abilene and came in through

Breckenridge and Ranger; I believe we went through [fol. 2564] Thurber, into Cleburne and Joshua and back into Fort Worth. That is as nearly as I can recollect the circle.

Q. Now, in general, Mr. Robinson, indicate on the map right there behind you about what part of the lines that covered. Perhaps you had better stand on the other side of the map and show the jury where you are pointing. Just

begin at Fort Worth and indicate how you went.

A. Well, we went up this line here (indicating on map) and went across it at several places, back and forth; we went up here to Petrolia and into Wichita Falls, and I believe up to Electra. Then we cut across to Abilene here (indicating on map), and then we came in through here and up to Brenckenridge and Ranger and near Cisco—I don't remember whether we went through Cisco or not—and apparently touched this line in a few places and to Joshua and then to Forth Worth.

Q. Now, did you go on any of the lines east of Fort Worth and Dallas?

A. No, sir.

Q. You are generally familiar with that territory, though, are you not?

A. I think so, yes, sir.

Q. You have done considerable construction work in the territory south of Dallas on the lines that come down as far as Round Rock, haven't you, through Waco, Hillsboro, and that territory?

[fol. 2565] A. We have done work in Waco; nothing in

any other place between there and Austin.

Q. Well, you are generally familiar with the soil conditions and the kind of country?

A. In a general way, yes, sir.

Q. Now, from your general knowledge of the soil encountered throughout the State, do you believe, Mr. Robinson, that the trip that you made would show you a typical condition for the whole system?

A. I don't know that I can say that it would be typical

for the whole system.

Q. I mean for the Texas part of the system.

A. I don't believe it could be much worse than the aver-

age that we looked over, would be a proper answer.

Q. Now, the Mr. Nichols that you say you went with is the Nichols of the firm of Hawley, Freese & Nichols, is it not? A. Yes, sir.

Q. Before you made this trip were you submitted some specifications by Mr. Nichols?

A. Yes, sir.

Q. Do you have those specifications with you?

A. Yes, sir.

- Q. Will you please read the specifications given you by Mr. Nichols?
- A. The original—the one that was given me originally? [fol. 2566] Q. No, the one that you used in preparing your last estimate.
- A. Well, I used the original specifications, and then I was given a correction this morning.
- Q. Well, will you read the specifications you relied upon? A. "Specifications for trenching Lone Star Gas System." Now, this is the original specification.

Q. Yes, sir.

A. "First. Done by other contractors. Right of way will have been cleared twenty-five feet with stumps cut to ground and all boulders and other obstructions blasted and removed so that trucks can pass right of way and string pipe. Gates will have been installed in fences and fences cut for trucks, etc. No. 2. Machine Excavation: This contractor. Include in machine excavation price necessary blasting, grubbing for ditch and machine leveling up for machine, getting machine across obstructions, creeks, etc., necessary hand work at obstruction, creeks, etc. No. 3. Hand Excavation: This Contractor. Include hand excavation price necessary blasting, grubbing for ditch. No. 4. Rock Excavation. This Contractor: Include in rock excavation price necessary grubbing for ditch, powder, compressors, caps, fuses, etc. 5. Backfill: This Contractor. Include in backfill price consolidated price to include backfill of machine, hand work and rock excavation. Where backfill is in rock, dirt is to be placed over pipe to a depth of at lease six inches before placing rock in ditch: 6. Clas-[fol. 2567] sification: 90 per cent of the yardage has been classified by driving a bar down on either side of the ditch every 500 feet. All yardage below lowest point bar can be driven is classified as solid rock. 10 per cent of the yardage has been classified from construction records. Hand excavation is on short lines where no machine is used at all—short taps—usually less than 100 feet in length.

7. Miscellaneous Items. This contractor is to clean up along ditch, shaping up backfill over ditch. This contractor is to furnish all necessary labot to lining up for trenching work, getting men, supplies, etc., to the work. Ditch is to be delivered in a smooth, uniform condition. This trenching is for gas line construction. Due consideration is to be given for delays usually incident to such construction. Contractor will be required to give bond, and to carry workmen's compensation, property damage \$20,000 limit, public liability \$10,000 and \$20,000 limits. The work will be done in units requiring an average of two machines for a construction period of eight months. In general the eight months period will be during spring; summer and fall. The estimates are to be as of December 31, 1931. Payment will be in cash on monthly estimates with 10 per cent retained. Retainage in no event will be held longer than one year." Do you want me to read the quantities?

[fol. 2568] Q. No, sir. But you were given the quantities, were you not?

A. Yes, sir.

- Q. The quantities, classifications and trench sizes by lines?
  - A. Yes, sir.
- Q. Now, since those original specifications were given you have you had any additional information furnished you by Hawley, Freese & Nichols?
  - A. Yes, sir.
  - Q. What were those-letters?
- A. Part of it is in the form of a letter and part of it in the form of a revised—slight changes and revised specifications.
- Q. Will you tell, Mr. Robinson, what additional information you got?
- A. The first information was to eliminate the backfill from the quantities as given in the original specifications. The other information was that the quantities had been changed somewhat, that the machine excavation quantity had been reduced and hand excavation had been increased. I don't remember whether there was a difference—the rock excavation, I believe, had been increased. Also the matter of the hand excavation, in the specifications there was one—there were two sentences added to the original specifications in regard to classification. They reas as follows: "Some excavation is classified as hand on lines involving rock ex-



[fol. 2569] cavation. Some lines classified as 100 per cent hand are a mile in length." That seems to be the only difference from the original specifications that I have been able to find.

- Q. Now, changes of quantities of yardage for the various types of excavation were made to eliminate the Oklahoma properties, were they not?
  - A. I was told so.
- Q. Now, from those specifications, bearing in mind the various data given you in the specifications, from your general information as to the costs of excavation, and from the inspection tour that you made of a substantial part of the system, did you then work out the costs for the various types of excavation per cubic foot?
  - A. Per cubić yard.
  - Q. I mean per cubic yard.
  - A. Yes, sir.

[fol. 2570] Q. And what are the prices which you find for the various kinds of excavation as of today?

Mr. Griffith: Just a moment, Mr. Fitzhugh; may I ask the witness a question?

Mr. Fitzhugh: Yes.

## Questions by Mr. Griffith:

- Q. Mr. Robinson, what experience have you had in connection with excavation on natural gas pipe line construction?
  - A. Only one small job, about fourteen years ago.
- Q. Other than that, you have had no experience at all in connection with the excavation for trenches for natural gas pipe line construction?
  - A. No, sir.
- Q. And your familiarity with the territory wherein the Lone Star Gas Company system is located in the State of Texas has been fully related by you in connection with the questions put to you by Mr. Fitzhugh, counsel for the State?

A. I believe so. I do not think there was anything overlooked.

Q. If your Honor Please, we will make the objection that the witness is not qualified to make an estimate in respect of the excavation on the Lone Star Gas Company system in the state of Texas by reason of the lack of information which the witness has frankly stated he has in connection with the company's property.

The Court: The objection is overruled. Mr. Griffith: Note our exception.

## [fol. 2571] Questions by Mr. Fitzhugh:

Q. I had a question pending. Will you read that question please?

Thereupon, the following question was read to the witness: "And what are the prices which you find for the various kinds of excavation as of today?"

A. This was made as of June 15, 1934. Machine excavation, 40 cents per cubic yard. Hand excavation \$1.20 per cubic yard. Rock excavation \$2.90 per cubic yard.

- Q. Now Mr. Robinson, are these different unit costs for these different types of excavation the prices for which your company would do that work, assuming those specifications [fol. 2572] and the quantities as given to you by Mr. Nichols? A. Yes.
- Q. How did you find your machine excavation cost of forty cents per cubic yard?
- A. Under that item, I have assumed that there would be five per cent of that excavation which would have to be done by hand, or by hand and team and other than machine work, and I have estimated that hand excavation will cost 84 cents per cubic yard, and that 95 per cent of it will be strictly machine work at a cost of 27 cents per cubic yard. Those costs are what I call the bare field costs. That gives an average of a little less than 30 cents per cubic yard. Then with my field supervision and insurance, bond premium, profit and overhead, those items added on brings it to my bid price of forty cents per cubic yard.
- Q. Now, in general, how did you find your hand excavation price of \$1.20 per cubic yard?

A. That is based on a field cost in the same way, of 84 cents a yard. That is 80 cents a yard for labor and five per cent of that for the use of hand tools and sharpening tools [fol. 2573] and blacksmith work, giving a cost of 84 cents, with the other items of supervision, bond premium, liability insurance and profit and overhead, which brings it to \$1.20 as a bid price.

Q. In general how did you get your \$2.90 per cubic yard

cost for the rock excavation?

A. Well, in the same way, figuring the cost of operating compressors and drilling and using dynamite and blasting, I arrived at a bare field cost of \$2.15 per cubic yard, which with the other items added brings it to \$2.90 for a bid price.

Q. What is the cost per hour you assumed for common

labor?

A. In this estimate I have assumed 40 cents per hour.

- Q. In estimating these prices, you have considered, have you not, that you would conform to the Code, the Construction Code of the N. R. A.?
  - A. Yes.
- Q. You understand, do you not Mr. Robinson, from the specifications given you, that the amounts of rock excavation given you were determined by the barring method?

A. Yes, that is what the specifications said.

- Q. At least 90 per cent of it, I believe?
- A. Yes, 90 per cent of it.
- Q. Now, using the barring method, it is probable that you have estimated a larger amount of rock excavation than would actually be incurred. Isn't that true—that is, of solid rock?
- A. I think the barring method of testing would develop a lot that would be called rock which could be cut with a machine.
- [fol. 2574] Q. But you have assumed, have you not, that all the classification called rock excavation would be solid rock for the purposes of your estimate?
  - A. Yes.
  - Q. And your \$2.90 cost was worked out on that basis?
  - A. Yes.
- Q. What do you understand by the term solid rock as you are using it?
- A. Well, the definition given in these specifications is that a material below which you can not drive a bar into it.

Q. And wherever you used the term solid rock in that connection, you mean a material that can not be excavated by machine, do you not?

A. Well, I don't understand your, Mr. Fitzhugh.

Q. Well, you do not assume that any of the quantities shown as rock excavation could be excavated by machine, do you?

A. Not in the estimate that I have prepared, no sir.

Q. The quantities originally given you were for excavation on the entire system, were they not?

A. Yes.

Q. And the quantities given you this morning were revised so as to eliminate the Oklahoma quantities, and that would make a total of about from eight to ten per cent of the various classes wouldn't it?

A. I did not figure what the percentage was.

Q. But these prices, in your opinion, would be correct [fol. 2575] whether applied to the total quantities or to the smaller quantities as given you this morning?

A. Yes.

Q. That's all.

### Cross-examination.

## Questions by Mr. Griffith:

- Q. Mr. Robinson, you testified before the Railroad Commission in connection with this Lone Star hearing, did you not?
  - A. Yes.
- Q. At that time, Mr. Robinson, what unit cost for machine excavation per cubic yard did you testify was reasonable?
- A. I believe it was 29 cents per cubic yard. Yes, 29 cents per cubic yard.
- Q. What unit price per cubic yard for hand excavation did you testify was reasonable?
  - A. Seventy cents.
- Q. And what unit cost for rock excavation did you testify to before the Railroad Commission?
  - A. \$2.30.
- Q. What cost per hour for common labor did you testified before the Railroad Commission that you had used in connection with your estimates?
  - A. 25 cents per hour.

Q. And that 25 cents per hour as used in your estimates at that time is to be contrasted with the price of 40 cents per hour?

A. Yes.

[fol. 2576] Q. Which you used in connection with this estimate?

A. Yes.

Q. Now, what insurance rate did you use in connection with your testimony before the Railroad Commission regarding excavation costs?

A. \$7.05 per \$100.00 of payroll.

- Q. And what is the insurance rate which you applied in connection with the estimate that you are now testifying to?
  - A. \$11.92 per Hundred Dollars.

Q. \$11.92?

A. Yes.

Q. Those insurance rates have appreciably increased, have they not?

A. They have in our case. I do not know whether it is

general or not.

- Q. I mean, as applicable to this character of construction work?
- A. Well, that is our special rate. I don't know whether the general increase is correct or not.

Q. Anyhow, you are paying increased rates?

A. We have to pay it, yes.

- Q. Now, the costs to which you are testifying this morning, in connection with the excavation of pipe line ditches on the Lone Star Gas Company system, do they cover and include the cost of the excavation of the trench for Line A of the company?
- A. Yes. Well, I am basing it on this total, which the specifications gives, divided up into certain lines, from A [fol. 2577] on down, and I don't know what all the letters are, and in that respect only can I say Yes.
- Q. Is Line A included in the list which was given to you by Mr. Marvin Nichols of the engineering firm of Hawley, Freese & Nichols?
- A. It was in original list, and I have had no—Yes, it is; that is correct.
- Q. Well, is it included in the excavation work for which you are making an estimate this morning?

A. Yes.

- Q. Does any of that line run through the State of Oklahoma?
  - A. I couldn't tell you.
  - Q. You don't know about that?

A. No, sir.

- Q. As a matter of fact, you are not familiar with the territory in Line A?
  - A. In that respect, I am not; no sir.
- Q. Now, after you had excavated a pipe line ditch, where there was straight machine excavation and for which you would have been compensated at the rate of 40 cents per cubic yard, would you agree for that price to maintain the ditch until the pipe could be laid therein?

A. I could not answer that without a little more definiteness. The assumption is made that there is not going to be [fol. 2578] any delay more than the usual delay, and I do not know how to definitely state what I had in mind.

Q. Well, assume you came along here today, and excavated a certain stretch of pipe line ditch by machine, and for which you were going to receive compensation at the rate of forty cents per cubic yard, and the pipe line gang could not get around to laying the pipe in that trench for a couple of days, and it rained and the sides of the trench caved in; would you, for that price of forty cents per cubic yard, go back and re-dig the ditch?

A. I can not answer that without a specific case on a specific job.

- Q. All right; but you have not contemplated that you would maintain the ditch open over any period for these unit costs per cubic yard, as to which you have testified?
- A. I have contemplated as to what I have viewed as usual delays on this kind of work and based on my own experience as to the work we have done. That is as near as I can describe it to you.
- Q. Now assume that in connection with excavation in rock over a stretch, that you receive \$2.90 per cubic yard for that excavation, which is your estimate of that cost?

A. Yes.

Q. Does that cost of excavation include the hauling in of dirt in which to bed the pipe in the bottom of the ditch?

A. My recollection is that I included that in the backfill price, but I am not sure of that because I didn't look over

[fol. 2579] the backfill price. I am not sure whether that

is in the back-fill price or in the rock.

Q. And you are unable to say this morning as to whether or not the cost of hauling dirt for bedding the pipe in dirt in solid rock trenches, is included in your cost for excavation in solid rock?

A. No.

Q. Or in the cost for backfilling?

A. That's right.

Q. Now, when you say you used a price of \$2.90 per cubic yard for rock excavation, do you mean that is an extra cost over and above the cost for hand excavation?

A. If I understand you correctly, I do not.

Q. Take a simple illustration: if you had one mile of solid rock to excavate, a trench a mile long, would the only compensation which you would expect to receive, be the \$2.90 per cubic yard for solid rock?

A. That's right.

Q. Contractors sometimes figure solid rock as an extra, don't they?

. A. Not usually where you have unit prices, but there is a class of bid where you do that; where you had a lineal foot price on the earth excavation, then the rock excavation price is usually over and above a lineal foot price for earth.

Q. Now you testified that you are not familiar with natural gas pipe line construction?

A. Not from our own experience, no sir.

[fol. 2580] Q. Well, are you familiar with natural gas pipe line construction due to any personal experience of your own?

A. Only from reading, and talking to pipe line contrac-

tors.

Q. You have never actually constructed a natural gas pipe line, have you?

A. No, sir.

Q. And I believe that with one exception, you stated, which happened about fourteen years ago, you never did any excavation for natural gas pipe lines?

A. No sir; that's right.

Q. Do you know anything about the specifications for natural gas pipe line construction generally?

A. No, sir.

Q. In connection with this estimate for unit costs of ma-

chine excavation and rock excavation, you have merely taken the specifications which have been furnished to you by Mr. Marvin Nichols, of the engineering firm of Hawley, Freese & Nichols, I believe?

A. Yes.

Q. And of course if those estimates furnished to you were not in accordance with standard practice, you might be a trifle off?

A. That is correct; I might be.

#### [fol. 2581] Redirect Examination

### Questions by Mr. Fitzhugh:

Q. In your unit costs, Mr. Robinson, you have included an allowance for contingencies, have you not?

A. I have made that five per cent in the machine excavation, which is in the nature of a contingency. That is what I assumed it to be or called it.

[fol. 2582] Q. Do you have any allowance for contingencies in your machine excavation costs?

A. That is what I just referred to.

Q. Do you in the hand excavation and the rock excavation?

A. Yes, I have.

Q. And is it likewise five per cent?

A. Well, I don't remember that it was exactly five per cent. I figured it different ways.

Q. What is the profit that you have assumed that you

would make from the application of these unit costs?

- A. Based on the old quantities—I have not figured it on the new quantities, but based on the old quantities, it was ten per cent of the cost, which would have been about \$193,000.00.
- Q. Well, it would work out on these new costs, as about the same wouldn't it?

A. About the same percentage, yes.

Q. Now, assuming the various things that Mr. Griffith called to your attention, such as hauling dirt for bedding pipe set in places where rock excavation was necessary, and such things as delays, and all that, do you believe that your contingencies allowances would take care of a normal amount of such costs as that?

A. I believe it will.

Q. And after having your attention called to those matters, do you think it would be necessary for you to reduce or revise your unit costs in any particular?

[fol. 2583] A. I don't believe so, no sir.

- Q. Would your company be willing and glad at these prices to undertake a construction job of this size, at these unit prices?
  - A. Yes.

Q. As of today?

A. Yes sir.

#### Recross-examination.

# Questions by Mr. Griffith:

Q. Mr. Robinson, one or two more question-, please. How much time did you spend going over the Lone Star system in company with Mr. Marvin Nichols?

A. My recollection is that we put in two full days; pretty

full days.

Q. You made most of your observations from an auto-

mobile, didn't you?

A. Well, I think we stopped at almost every one of the points and got out of the car and looked at the surrounding territory.

Q. How many miles did you cover in that two days—just

approximately?

- A. I would guess about 600 miles.
- Q. About 600 miles in two days?

A. Yes.

Q. And most of your observations of the territory were made from the comfortable seat of an automobile?

A. Well, on that trip we were riding most of the time;

[fol. 2584] that is correct.

- Q. If a contractor is going to stay in business, Mr. Robinson, it is incumbent upon him to make some allowances for contingencies in most all cases?
  - A. Yes, in most all cases.

# Redirect examination.

# Questions by Mr. Fitzhugh:

Q. You had a pretty good knowledge of this territory before you made that trip?

A. A good part of it, yes.

Q. And the trip was made mostly to find out the topography of the country, and the rivers and breaks and so on?

A. That and other information with which I was not familiar.

Q. Now, isn't it a fact, Mr. Robinson, that it wouldn't make any difference, so far as the costs of excavation are concerned, whether you are excavating a trench of a given size and depth for a gas line or a water line or what-not? The cost would be still just the same, wouldn't it?

A. I can not see but very little reason for any difference; there is a little difference, but it is not a big item; it is

not a material item.

Q. And you would not feel it necessary, would you, Mr. Robinson, to include any extra allowance for contingencies in estimating these costs, simply because it would be excavation for a pipe line?

[fol. 2585]. A. I can think of none.

Q. That's all.

Mr. Griffith: That's all.

The Court: Stand aside, Mr. Witness.

Mr. Fitzhugh: Oh—just one more question, Mr. Robinson, before you leave. This cost you used of \$11.92 per \$100.00 of payroll for insurance is the rate your company gets, and is not the manual rate. Is that correct?

A. We have a debit over the manual rate.

Mr. Fitzhugh: Yes, and this is your company rate?

A. Yes.

[fol. 2586] J. A. Phillips, a witness for plaintiffs, having been duly sworn, testified as follows:

Direct examination.

#### Questions by Mr. Fitzhugh:

Q. Will you please state your name?

A. J. A. Phillips.

Q. Where do you live, Mr. Phillips?

A. Houston, Texas.

Q. What is your business?

102 - 3104

A. I am in the practice of Certified Public Accountancy.

Q. How long have you been engaged in the practice of Public Accounting?

A. About seventeen or eighteen years.

Q. State in general and as briefly as possible, Mr. Phil-

lips, your experience in the accounting profession.

- A. Well, in 1917, I believe it was, I went with a firm of National accountants, so-called—firms that have offices throughout the country. I continued with that firm until 1925, at which time I opened my own office. While with the [fol. 2587] firm that I was first associated with I practiced in several of their offices, as time went on, handling generally larger assignments, including such examinations as an audit of the State Treasury Department of Texas, work in connection with the reorganization of Long-Bell Lumber Company, and generally engaged in the practice of accountancy in all of its branches in respect to auditing, system work, and so forth, in varied lines of businesses.
- Q. What was this National accounting firm that you mentioned?
  - A. Ernst & Ernst.
  - Q. Are you a Certified Public Accountant in Texas?
  - A. I am.
- Q. Were you at any time identified with the body of the State that gives examinations for the certifying of Public Accountants?
- A. Yes; I have several times served on that Board, and have been its Chairman.
- Q. Were you serving in that capacity about two yearago?
  - A. I was.
- Q. Now, your firm was employed, was it not, along with the engineering firm of Hawley, Freese & Nichols, by the Railroad Commission of Texas to make an investigation of the properties and business of the Lone Star Gas Com-[fol. 2588] pany?
  - A. It was.
  - Q. About what time did that employment take place?
  - A. Late in 1931, I believe it was-in December.
- Q. After being employed by the Railroad Commission did you start making an investigation of the books of the Lone Star Gas Company?
  - A. We did.

Q. Who all worked on that investigation?

A. I am not sure that I can name them all from memory; we had a rather sizable crew at one time or another. I will name some of them, but it will not be a complete list: Mr. Harris—Thomas Harris was on the assignment; Mr. George Berly, Mr. Krizan; Mr. Leon O. Lewis worked with us on that assignment; Mr. Hartell—I don't remember the names of all of those that were employed in connection with our first engagement; but I will say that we had some twelve or fifteen, at the peak, employed on the work.

Q. There was another firm of accountants that worked with you, was there not?

A. We were associated with the firm of Rogers, Smith & Company, on that assignment.

Q. And where do they do business?

A. San Antonio, Texas, San Angelo, Texas, and Fort [fol. 2589] Worth, Texas.

Q. Now, about how long, Mr. Phillips, did the investiga-

tion you made on your first assignment take?

A. We started the work, I believe, late in December, and it was completed some time in May, 1932. We started in December, 1931.

Q. And have you or your men worked from time to time on the books of the Lone Star Company practically ever since?

A. Yes, we have had men pretty well continuously in the offices of the Lone Star Gas Company since that date.

Q. State whether you at one time appeared before the Oklahoma Railroad—the Oklahoma Corporation Commission to testify as to the properties and business of the Lone Star Gas Company?

A. I did.

Q. And you likewise testified, did you not, before the Railroad Commission of Texas?

A. I did.

Q. Now, have you prepared in exhibit form a report to show your investigation and the facts found in your investigation of the books and records of the Lone Star Gas Company, to introduce as your exhibit in this case?

A. I have.

Q. Will you produce those exhibits, please, sir. (Witness hands copies of exhibit to counsel.) Now, the report to [fol. 2590] which you have just referred, Mr. Phillips, is

entitled on the outside cover, "Report on Special Investigation of Records of Lone Star Gas Company Texas Properties, March 31, 1934. J. A. Phillips Company, Certified Public Accountants."—Is that correct?

A. That is correct.

Mr. Fitzhugh: We offer the exhibit in evidence, and ask that it be appropriately marked.

Mr. Fitzhugh: What number is this? The Reporter: Plaintiffs' Exhibit 4.

Mr. Griffith: Pardon me, Mr. Fitzhugh, may I ask a question or two?

Mr. Fitzhugh: Yes, sir.

#### Examination by Mr. Griffith:

Q. Mr. Phillips, in connection with the accounting report which you have just identified, did you treat all of the revenues which were procured from sales in Texas, as Texas [fol. 2591] revenues?

A. No, we did not treat all of the sales within Texas as Texas revenues.

Q. Just what did you do in that connection?

A. We first made a determination of the gas produced and/or purchased within the State of Oklahoma, and then we gave credit for the Oklahoma sales within the State of Oklahoma, and to the extent that the gas produced and/or purchased was in excess of Oklahoma sales we treated those sales in Texas as applicable to Oklahoma business.

Q. How did you treat the property and business which we know as Line A—that is, on the pipe line system extending from Wheeler County, Texas, through the State of Oklahoma and back into the State of Texas?

A. Well, now, our determination was principally of operating revenues and operating expenses. It is true that we have attached a schedule of so-called Texas properties, mainly for the purpose of finding a basis for percentage calculations. Of course, we submitted no schedule of property as being our finding of the property that is located within the State of Texas. Answering your question more directly, I would say that that line that you have reference to is included in our schedule of property there.

Q. It is included in the schedule of Texas properties? [fol. 2592] A. Yes, it is.

Q. And how did you account for the revenues—that is, the sales of gas from that line and of the gas transported

through the line?

A. We didn't make an accounting of gas from lines, Mr. Griffith. As I explained, we accounted for the gas produced and/or purchased in Oklahoma, and whether it was sold in Oklahoma or Texas we eliminated it from the Texas calculation.

Mr. Griffith: If Your Honor please, we object to the introduction of the report just identified by the witness J. A. Phillips, for the reason that it is irrelevant and immaterial, and not germane to any issue as made by the pleadings in this case, in view of the fact that, as frankly stated by the witness, it does not attempt to segregate as between the property revenues and expenses of the Company, first, in respect of intrastate operations, and secondly, in respect of interstate operations.

The Court: The objection is overruled.

Mr. Griffith: Note our exception.

(Thereupon the document above referred to was marked as Plaintiffs' Exhibit No. 4.)

[fols. 2593-2594] By Mr. Fitzhugh:

Q. Turn to the first sheet in your Exhibit 4, Mr. Phillips.

A. Yes.

Q. What do you show on that sheet?

A. On this sheet I show our determination for the calendar years 1933, 1932, 1931, 1930, 1929, and for the twelve months accounting period ended March 31, 1934, of the revenues and expenses of what we have determined to be the Texas operations.

[fol. 2595] Q. You list the items appearing on page 1 as Revenues, and distinguish the revenues from the expense items, do you not.

A. That is true.

Q. Now, the first item under your Revenues is Gas Sales.

Will you please explain what this item covers and how you

found the amounts for the various years?

A. We found the total gas sales of the Lone Star Gas Company for the respective accounting periods here involved. We then made a determination of the production and/or purchases within the State of Oklahoma. We then offset such finding with the sales within the State of Oklahoma, and the excess of Oklahoma production and/or purchases over Oklahoma sales were sales in Texas; and in respect to those sales we found the average price received for gas in Texas delivered at the city gate, and we gave Oklahoma's excess volume credit, by applying the average Texas price to that excess. We then made a deduction for a small amount of compressor station and transmission system expenses to take care of the hauling of that gas to the Texas points; and, finding that net credit for Oklahoma sales, we made it, and reduced the Texas sales to that extent. And this finding here represents the Texas sales after [fol. 2596] the credit has been given for what we determined to be the Oklahoma gas sold in Texas.

Q. Now, you did credit to Oklahoma, did you not, all the revenues from the sale of gas which came from the State

of Oklahoma and was sold in the State of Texas?

A. By that method, I did.

The Court: Just a moment. Mr. Phillips, I don't know whether I am accountant enough to follow what you said or not. Do I understand you to say that after crediting and debiting, as you have testified, what you determined to be Oklahoma gas, produced and purchased, that your final figure applies to what you have determined to be Texas or intrastate gas?

The Witness: It does.

The Court: That is what I wanted to be clear about. I didn't know whether I understood you correctly.

Q. The method you have used, Mr. Phillips, amounts to allowing the Oklahoma operations the free use of the Texas lines used for the transportation of gas from Oklahoma sold in Texas, does it not?

A. Except as to the pro rata of the operating expenses [fol. 2597] pertaining to compressor stations and trans-

mission lines.

Q. Now, of the amounts shown by years, the low point for gas sales is found in what year?

A. For the calendar year ended December 31, 1933.

Q. From the year 1929 through 1930, 1931, and 1932, here was a steady decline in sales, was there not?

A. That is true.

Q. Now, from that period into 1934 the gas sales, apparatly, have picked up again, though,—isn't that correct?

A. That is correct.

col. 2598] Q. The figures would seem to indicate, Mr. hillips, that from the low point reached in 1933, gas sales re now beginning to take a decidedly up trend?

A. Well, I would say that the trend is upward.

Q. Yes, sir.

Mr. Griffith: Not sizable?

A. No.

Q. Did the decline in gas sales result primarily from a ecline in the industrial revenues or the domestic sales?

A. Well, I think primarily from the industrial sales.

Q. That is at least through the years 1929, 1930, and 1931, it not?

A. That is correct.

Q. And 1932?

A. That is correct.

Q. Now, from the year 1932 to the year 1933 most of the rop was occasioned by the loss in domestic sales, was it of?

A. 1932 and '33?

Q. Yes, sir. From 1932 into the year 1933, the drop was ostly due to the loss of domestic consumers?

A. That is correct.

Q. Now, proceed to an explanation of the next item apearing under Revenues—Miscellaneous Operating Revnues.

A. Miscellaneous Operating Revenues were determined be entirely allocable to Texas Revenues, the amounts being ol. 2599] for the periods: For the period ended March, 1934, \$1,596.78; for the calendar year 1933, Miscellaneous perating Revenues amounted to \$1,442.91; for the calendar ear 1932, \$1,491.98; for the calendar year 1931, \$1,631.35; r the calendar year 1930, \$4,419.90; and for the calendar ear 1929, \$9,543.56.

Q. What do you include under Miscellaneous Non-Operat-

g Revenues-the next item?

A. Miscellaneous Non-Operating Revenues consist of a number of items, such as cottage rentals, office building rentals, farm rentals, telephone rentals, sales of electric current, sundry earnings, and so forth.

Q. Now, proceed to an explanation of the first item in your Expense section—Gas Purchased?

A. We made a determination of gas purchased on the basis of actual purchases within the State.

Q. Well, take your items as they now appear, Mr. Phillips, and proceed to make whatever explanation you feel is necessary to make it clear to the jury what is included.

A. The next item is Gathering Expenses. In connection with Gathering Expenses, some of the items were applied directly on the Company's books as between Texas and Oklahoma. There were other items that we considered common—that is, applicable to operations in each of the two states; and, of course, we had to find some measure of [fol. 2600] allocating to Texas a portion of these expenses, and to Oklahoma a portion; and this we did. For example, we found that Field Measuring Station Labor applies to operations in both states. That is also true of Field Measuring Station Supplies and Expenses and Maintenance of Measuring Stations; and we made our determination under this calculation: We prorated on the basis of the percentage of Field Measuring Station Structures and Field Measuring Equipment to the total for both states. In other words, we made a determination of these Structures and this equipment-Field Measuring Stations and Field Measuring Equipment, and we found the percentage of that to all of the Field Measuring Station Structures and Equipment, and we took that percentage as being the percentage applicable to these common expenses, and it was so applied. After making that application, we had certain other expenses that we considered common: Superintendence, Labor Operating Wells, Superintendence Supplies and Expenses, Gas Wells Supplies and Expenses, Superintendence of Maintenance. Now, our proration of these items was, first, we made this other proration I have just testified to; therefore, we found a new direct total for each operation—that is, the operation in Texas, and the operation in Oklahoma; adding to the figure shown on the book our prorations of the first items referred to; then we took the per-[fol. 2601] centage of direct expenses to total expenses for each operation, and applied them to Texas and to Oklahoma. Does that explain satisfactorily those common charges?

Q. Yes, sir.

A. Now, Production Expenses, or Producing Expenses, are shown direct on the company's books, and we so included them in our accounting study. Now, I don't believe I testified in respect to Compressor Station Expenses, did I,

Q. No, you didn't.

A. Compressor Station Common Expenses were prorated on the following basis: Direct, except Repairs to Buildings. All common expenses, except Repairs to Buildings were prorated to the Direct Expenses applicable to the operations in Texas and to Operations in Oklahoma; repairs to buildings prorated on the basis of books costs as between Texas properties and Oklahoma properties. That was the basis for prorating the Compressor Station Expenses, the percentage being to Texas 89.78; and to Oklahoma 10.22.

Q. The next item is Transmission System Expenses.

A. Transmission System Expenses were prorated under some four or five calculations, which I will endeavor to explain clearly and briefly. First of all, we have the Expenses in the Gainesville District, and the Expenses in the Vernon District. Now, in respect of those expenses we took the ratio of Texas-Oklahoma transmission property as furnished us [fol. 2602] by the engineers for the Gainesville District, and we made the proration on that determination. Likewise, we took the ratio of Texas-Oklahoma transmission property in the Vernon District, which was furnished us by the engineers, and we made the allocation on that basis. The next items for proration, Measuring Station Labor, and Measuring Station Supplies and Expenses, and these expenses were prorated on the basis of the ratio of Texas-Oklahoma Measuring Station Equipment and Measuring Station Structures. In other words, we took the respective percentages of those structures and equipment in the two states, and made our proration of expenses on that basis. The next item is the item of Maintenance of Measuring Station Structures.

Q. Just before you get to that, Mr. Phillips, the Vernon and Gainesville distribution districts contain operations both in the states of Oklahoma and Texas, do they not?

A. That is correct. The next item for allocation is the item of Maintenance of Measuring Station Structures. This

expense was prorated on the ratio of Measuring Station structures in the respective states. Again, we found the percentage of the structures in each state to the total of all such structures, and that percentage was applied to the expense. The next item is Maintenance of Gas Cleaners. I believe I have not explained Maintenance of Measuring Station Equipment. Measuring Station Equipment Expense was [fol. 2603] prorated on the basis of the ratio of Texas-Oklahoma Transmission Measuring Station Equipment—the respective percentages in each state. Then we have a group of items—Superintendence, Inspection, Labor, Other Transmission System Labor, Superintendence supplies and Expenses, Transmission Line Supplies and Expenses, Inspection supplies and expenses, Superintendence of Maintenance, and Maintenance of Gas Cleaners. Now, these expenses are prorated on the basis of the ratio of Texas-Oklahoma Direct Expenses, after we had made these other calculations, prorating these other expenses I have just testified to in respect to these operations. We then applied these allocations to the respective Direct Expenses and made this allocation to the respective new totals. Now, the next item shown under Expenses is that of General Expenses. We adopted for General Expenses a uniform percentage for all items, except two, by years. In respect to Donations, an item of expense included in General Expenses, we decided that all of the Donations were charges against the Texas Operations, and we so applied them. There was another classification, in order that there may be no confusion, of Dues and Subscriptions. Dues and Subscriptions were prorated on the adopted percentage basis for all other General Expenses. Now, the other exception to the General percentage allocation is that of Regulatory Commission Expense. For all years except 1929 and 1930 we applied what we determined to be the [fol. 2604] Direct Expenses—Regulatory Commission Expenses—in respect to the states of Texas and Oklahoma rate matters. For the years 1929 and 1930 we allocated 50 per cent of such expenses to Texas, and 50 per cent to Oklahoma. The reason for different basis in 1929 and 1930 was the fact that it was somewhat difficult to determine actually, and while it is my general understanding that the Company's rate controversies up to that point had been principally in Oklahoma, rather than in Texas, I none the less felt that a good deal of the work it did in connection with its Oklahoma cases served a good purpose or valuable purpose in connec-

tion with the Texas cases that came on later. Now, you are next interested in knowing how we found this percentage that we applied. After making certain correction to what we may term "Operating Expenses" and charges—I would not use the correction; but after making certain allocations in respect to what we will term "production expenses"that is, producing expenses, compressor station expenses, transmission station expenses, and so forth—we found the percentage of those respective operations applying, as we determined it, to each of these states, to the whole of such expenses, and that is the percentage we have used by years in our allocation of distribution of so-called general expenses; the percentages being to Texas for the periods I will read into the record, as follows: The Twelve Months [fol. 2605] period ended March 31, 1934, 85.33; the calendar year 1933, 85.38; the calendar year 1932, 85.74; the calendar year 1931, 86.50; the calendar year 1930, 85.95; the calendar vear 1929, 84.42. The next item shown in our schedule, page 1, Plaintiff's Exhibit Number 4, is that of Taxes— Other than Gross Production and Federal Income Taxes. Ad valorem taxes were on a direct basis, less the percentage that went to what is understood to be non-public service operations. Automobile taxes were prorated or allocated on the basis of March 31, 1934 auto investment applicable to the respective states, less five and a half per cent determined to be non-public service property; miscellaneous taxes, franchise and foreign corporation, permit fees, and so forth, prorated on the direct basis, or an actual basis, as it applied to the respective states, less the percentage of non-public service property applicable to the year as determined by the Company. Federal capital stock tax, Federal check tax, was prorated on the same basis as we prorated general expenses; and, of course, the same calculation we made for each of the several accounting periods involved here.

[fol. 2606] The next item is that of Bad Debts and Adjustments. Bad debts and adjustments were prorated, or, rather, they were charged to the respective operations just as they occurred—in other words, direct. We were able to tell the losses from bad debts and adjustments on Texas operations as distinguished from bad debts and adjustments applicable to Oklahoma. The next item—I believe I have passed Auto and Truck Expense Underdistributed. Now, Auto and Truck Expense Underdistributed is the sum that

remains after the application of the company's policy in its use of automobile- and trucks. That policy has been testified to in the record, and it seems the automobile equipment is used on a per diem basis, and on this clearing account there is a balance as a result of the company's method in applying expenses; so there has to be some application of the sum that remains, and we have distributed that item on the basis that we distributed so-called General Expenses. The next item is that of Miscellaneous Non-operating Expenses, and involves comparatively small amounts. For the accounting period ended March 31, 1934, the amount was \$192.72; for the calendar year 1933 it was \$192.72; for the calendar year 1932, \$856.22; for the calendar year 1931, \$447.70; for the calendar year 1930, \$3,872.23; for the claendar year 1929. Now, these Miscellaneous Non-operating Expenses were, in the main, applied direct; that is, we were able to determine that it was applicable to Texas operations or [fol. 2607] Oklahoma operations, as the case might have been, with two or three exceptions; no exception for the accounting period ended March 31, 1934, and no exception for the calendar year 1933, and no exception for the calendar year 1932, but for the calendar year 1931 we had one item of \$222.50 that we prorated or allocated on the same basis that we used for General Expenses, resulting in \$192.46 being charged to Texas operations and \$30.04 to Oklahoma operations. For the calendar year 1932 we likewise prorated the total of these expenses on the General Expense basis, Texas being charged with \$3,872.23 and Oklahoma with \$632.98, and there were no such expenses for the year 1929. Now we come to an item we have in the expense section that we have designated Texas-Oklahoma Gas Sales Adjustment, and, as I explained into the record early in my testimony, this figure results from our determination of Oklahoma volumes of gas and the sales of volumes of gas in Oklahoma, and the excess volumes produced and/or purchased were credited to Oklahoma on the basis of the average price received for gas in Texas. That resulted in these credits: to Oklahoma operations, which, of course, come out of the Texas group, for the twelve-month accounting period ended March 31, 1934, \$62,-234.07; for the calendar year 1933, \$29,617.92; for the calendar year 1932, \$342,429.94; for the calendar year 1931, \$554,-766.20; for the calendar year 1930, \$1,213,262.91, and for the calendar year 1929, \$1,655,550.49. Obviously, in the earlier

[fol. 2608] years of production and/or purchases in Oklahoma were substantially higher than they have been in more recent periods. That accounts, of course, for the larger credit going to Oklahoma in the earlier years. Now, we have totaled the items listed down to that point under Expenses.

Q. All right. Now, then, these amounts on the Texas-Oklahoma Sales Adjustment show, do they not, that the gas coming from Oklahoma, the net amounts of such gas, have been steadily decreased since 1929?

A. That is true.

Q. Coming from a very large amount in 1929, \$1,655,-550.49, down to very insignificant amounts in 1933 and 1934 of twenty-nine thousand and sixty-two thousand, respectively?

A. That is true.

Q. Now explain as briefly as possible, Mr. Phillips, the other tems appearing on Sheet 1, beginning with Producing Expenses.

A. The next item is that of Producing Expenses. We were able to set up Producing Expenses in respect to the operations in each of the States of Texas and Oklahoma directly for the later years, but for earlier periods the company's books were not so kept as to permit a determination of these expenses applicable to the respective States. We [fol. 2609] were able to make that direct finding as shown by the company's books for the accounting period ended March 31, 1934, the calendar years 1933, 1932 and 1931, but for the other years were able to pick out only two items that we felt justified in allocating in their entirety to the designation Producing Expenses, and these items are: cost of repairing and cleaning out wells, which is carried separately on the company's books, and the cost of abandoning wells. We treated these two items of expense as being Producing Expenses, and have so included them on the line in this schedule, for Producing Expenses, thereby reducing the total that had been shown in the account caption "Gathering and Producing Expenses". The next item is that of Gross Production Taxes. Gross Production Taxes were applied direct, according to the State to which they were paid. The next item of expense shown on this schedule is that of Drilling Tools Expense Expenses Underdistributed. Drilling Tools

Expenses Underdistributed are that particular sum, not in amount but in principle of applying it, comparable to automotive equipment, and we concluded, as we did in the case of the Underdistributed Automobile Expenses, that it should be on the basis of the percentages used for General Expenses, and that is how this item was distributed. The next item is that of Dry Holes. Dry Hole Expense is actual in respect to the two States, as shown by the company's books. [fol. 2610] The next item is that of Cancelled and Surrendered Leases, and it, too, represents direct determinations shown on the company's books, as to whether it is a cancelled and surrendered lease in Texas or a cancelled and surrendered lease in Oklahoma, and this item of expense hasbeen included as a direct item either to Texas or Oklahoma. as shown by the company's books. The next item is that of Management Fees. Now, our allocation of Management Fees is not entirely accurate, but it simply sets over too much expense to Texas rather than being entirely accurate in that case, but because of this condition we computed the management fee applicable to Texas operations on the basis of one per-one cent per thousand cubic feet; that is used for determination of the management fee.

Mr. Griffith: Let me get that answer.

A. On that basis we used-

Mr. Griffith: Did you say one cent per thousand?

A. Yes, but I didn't mean that.

Mr. Griffith: Well, that is what I thought.

[fol. 2611] A. The point is that we computed it just as it is computed and paid by the company, on the basis of the amount of sales of gas. Now, here is where we committed error in the application of this expense, and we didn't have time to correct it. We first made our findings of sales of gas within the State of Texas, and we computed the management fee on the basis of the Texas sales. Well, subsequently we made this adjustment of gas sales to the State of Oklahoma, with the result that we did not eliminate the portion of the management fee we applied that was considered to be Oklahoma sales, and with exception it is accurate. It gives the State of Oklahoma a little less expense than it should take and it gives Texas a little more than it should take.

Q. So the mistake which you made results in the Texas apportionment being the loser, does it not?

A. To the extent of the amount involved, yes. I would like to make one further statement at this time, because I want to confess that we made two errors in presenting these schedules, which were prepared under rather high pressure. At the time we distributed non-operating income, I had intended that all of the office rental income should go to Texas operations and likewise that all of the general office building expense should be charged to Texas, but in making our calculations in computing the expenses. we did set over to Oklahoma a prorata of the general office building expense, and so I want to read this correction into the record in respect to the general office rental income in [fol. 2612] the amounts that will be stated, our schedules, page 1, has overstated the miscellaneous non-operating revenue to Texas: For the twelve month period ended March 31, 1934, it was \$3,772.39. For the calendar years of 1933, \$3,766.84; 1932, \$1,950.77; 1931, \$2,416.69; 1930, \$2,857.20; 1929, \$2,968.25. Miscellaneous non-operating revenue shown on page 1 of Plaintiff's Exhibit No. 4 should be reduced for the respective years in the amounts there stated.

Q. What basis did you use in computing the amount to

include for management fees?

A. We used a unit applied to volume. Now, I should be, but that is just a clerical calculation and it is one which I have not kept in my mind. I can not testify at this moment to what volume the unit applies. The only thing I will say is that we have calculated it on the basis employed by the company.

Q. What is the basis employed by the company in com-

puting the management fee?

A. That is just what I tried to explain that I did not have in my mind at this time. It is a unit applied to a certain volume; whether it is applied to one thousand cubic feet or ten thousand cubic feet, I don't know.

Mr. Griffith: For the purpose of refreshing your memory, Mr. Phillips, isn't it one per cent of the gross revenues?

A. I rather think that is correct. It is a unit applied to the gas sales, either in dollars and cents or in volume, but I do know that the method we employed is exactly that in computing and paying the management fee used by the company.

[fol. 2613] Q. Well, at any rate, the books do not show, do they Mr. Phillips, that the amounts paid for management fees are for some particular services?

A. No, the books of the company do not show any breakdown of services rendered in respect to the management

fee.

Q. Were you allowed to examine the books of the Lone Star Gas Corporation, which are the dummy set of books kept in Dallas, for the purpose of finding out the actual services for which the management fee was paid?

A. No, we were not permitted to examine any books of

the Lone Star Gas Corporation.

Q. So you can not say of your own knowledge, so far as the books of either company are concerned, whether there was actually any service performed in return for this management fee or not; is that correct?

A. Not of my own knowledge.

Q. With the exception of the management fees, all of the expenses in the lower division of your expenses, are expenses incurred in the production of gas and the development of leases, are they not?

A. You make reference to the group of five items at

the bottom of page 1?

· Q. Yes, I am talking specifically about the producing expense, gross production taxes, drilling holes expense—

A. Drilling tools expense, it is.

- Q. Drilling tools expense, under distributed. [fol. 2614] A. That is "under-distributed" and not "undistributed".
- Q. And dry holes, and cancelled and surrendered leases?

  A. I consider that those items of expense do apply to the production of gas.

Q. What are the net earnings of the company, before providing for depletion, depreciation and federal income taxes,

as found by you on sheet 1?

- A. For the accounting period ending March 31, 1934, it was \$4,416,571.74. For the calendar year 1933, \$4,185,327.48. For the calendar year 1932, \$4,882,297.56. For 1931, it was \$4,758,714.46. For 1930, \$5,232,725.81; and for the calendar year 1929, \$5,579,679.94.
- Q. These totals show, do they not, Mr. Phillips, that the low point during the periods studied for net earnings occurred in 1933?

A. For the accounting period, the calendar year 1933, yes.

Q. And that the earnings for the twelve months ended March 31, 1934, show an increase in net earnings of more than \$300,000?

A. Well, it is some \$230,000.00.

Q. Now, does that complete the explanation necessary on page 1?

A: I think it does, Mr. Fitzhugh. We have made three foot notes on this schedule calling attention to red figures, and one foot note calling attention to the method of handling gathering expense, and one for that of producing expense for the years of 1929 and 1930, and that does complete my explanation of the figures shown on that page, un-[fol. 2615] less it be desired that I give, in respect to each year or each period, the percentages determined, as well as the amounts shown.

Q. That is, the percentages as between Oklahoma and Texas?

A. That is correct.

Q. Will you please give those percentages?

A. I will have to give it by items, of course. Q. Well, that is a pretty long affair, isn't it?

A. It would be. It would take probably about an hour to testify to all those percentages.

Q. Well, let's don't take up that much time right now. We will let Mr. Griffith go into that. Now, what do you

show on page 1-A.

A. Page 1-A contains gas sales determined to be applicable to Texas operations, showing by accounting periods in respect to domestic and industrial gas, separated, the volumes, the average prices, and the amounts received, broken down as between sales to affiliated companies and sales to other companies and field sales and miscellaneous industrial sales, the sales being recapped or totaled at the foot of the page, showing the total domestic volume, price and amount for each accounting period, and showing like information in respect to the industrial gas sales.

[fol. 2616] Q. Now, in the figures given by you for the total gas sales, and by referring to the totals for industrial gas sales by years it can be seen that the industrial sales

dropped off during the period through 1929, 1930 and 1931, and then struck about a lever from 1932 on up to the present time. Is that correct?

A. Well, 1932 was also a drop over 1931, but 1933 shows a pickup, as does the twelve month accounting period ending March 31, 1934, show an increase over the calendar year 1933.

Q. Now, as contrasted with this, the domestic sales dropped off from \$6,972,718.76 in 1929, to \$6,381,871.24 in 1932?

A. That is correct.

Q. Or a very small difference as between those two figures; is that right?

A. Well, not a large difference—something under \$600,000.00.

Q. Well, as compared with the industrial-

A. It's about 10 per cent.

Q. Yes. Then from 1932 to the present time, while the industrial sales picked up some or stayed at fairly close to [fol. 2617] the same level, the domestic sales were falling off, were they not?

A. Domestic sales for 1933 fell off very substantially in comparison with 1932, and also fell off for the twelve months accounting period ended March 31, 1934, in a small amount, while, as has been shown here, the industrial sales for the year 1932 are a very level figure compared with the industrial sales figure for the twelve months ended March 31, 1934. There is some decrease under 1933.

Q. From 1932 to 1933, as shown by your figures, over a Million Dollars was lost in the domestic gas sales?

A. That is correct.

Q. What do you show on the next sheet—sheet 2?

A. We show on that sheet a schedule of gas purchased, showing the total gas purchased, thousand cubic feet, the average price paid, the amount paid, distinguished as between purchases from wells owned by others, and royalty gas purchases. We show that data for each of the accounting periods involved here.

Q. For gas purchased during the 12 months ended March 31, 1934, you show on this sheet, do you not, an average price of 5½ cents per thousand cubic feet?

A. That is correct.

Q. Going now to sheet 3, what is shown on that page?

A. On page 3, or sheet 3, we show the detail of gathering

expense for the accounting periods, for first the twelve months period ended March 31, 1934, and then for the calendar years 1933, 1932 and 1931. This information is shown [fol. 2618] by classes of expenses, and represents the expenses determined, after the allocations were made, previously testified to by me.

Q. This sheet represents the detail?

A. Yes, in support of the items on the control schedule of revenues and expenses.

Q. And the totals which you show on this sheet are carried forward and compose the totals for gathering expense, as

A. That is correct.

Q. Page 4 likewise applies to the gathering expense, Mr. Phillips, does it not?

A. It applies to gathering and to producing, because the records of the company for those two years were not so kept as to enable us to make a positive split between the producing and gathering expenses.

Q. What is shown on page 5 of the Exhibit, Mr. Phillips,

which is the next succeeding page?

shown on sheet 1, do they not? ...

A. On page 5 of the Exhibit, we show for each of the accounting periods in respect of which I am testifying, as included in this Exhibit No. 4, the compressing station expenses allocated to the Texas operations, showing a detailed breakdown of the items, first under the so-called operating expenses, and second, under maintenance. These figures are the figures determined after making the direct applications, and the allocations that I have previously testifyed to, and the totals at the foot of the page are the totals that are [fol. 2619] carried forward to sheet 1 of this exhibit.

Q. In the same way, the detail on page 6 carries forward the totals for the transmission system expense?

A. For the three calendar years 1933, 1932 and 1931, and the twelve months accounting period ended March 31, 1934, yes.

Q. And that accounts, also, for pages six and seven of the exhibit, does it not?

A. Page seven details the years 1929 and 1930.

[fol. 2620] Q. Mr. Phillips, you had gotten as far as page 8, I believe, in your Exhibit Number 4?

A. That is right.

Q. Will you kindly show or explain the details shown on

page 8?

A. On page 8 of Plaintiffs' Exhibit No. 4 we show a detail of the General Expenses in respect to Texas operations, as determined by us, of the Lone Star Gas Company for the period: the calendar years 1933, 1932, and 1931, and a 12-month accounting period ended March 31, 1934. We show the classification of accounts as employed by the Company in keeping its records, and we show the amounts of the respective expenses, after we have made our allocations, as testified to by me this morning.

Q. I notice in the case of Regulatory Commission Expenses there is a zero amount shown for the year 1931? [fol. 2621] A. That is true.

Q. For the next year 1932, there is, however, an amount of \$149,282.38?

A. That is correct.

Q. From the amounts shown by the Company's books, this is rather an erratic form of expense, is it not?

A. Well, you mean by that it fluctuates widely?

Q. Yes.

A. Yes.

Q. Now, you don't show the details for any years prior

to 1931, do you?

A. Yes; I show that on a separate page of Exhibit 4, being page number 9, and the designation of the particular expense is "Valuation Suspense", which is the account name carried on the Company's books.

Q. Yes, sir.

A. But in nature, exactly the same as Regulatory Commission Expense.

Q. Would you say, Mr. Phillips, that all of the amounts shown for Regulatory Commission Expenses are accounted for in the case now being heard in Texas and by the case that was heard before the Corporation Commission of Oklahoma in Oklahoma?

A. Do I understand you to ask me if this expense for Regulatory Commission Expenses does include the ex[fol. 2622] penses of both hearings—hearings in both states?

A. I am asking you if the amounts include any other expenses other than in those two cases?

A. Not to my knowledge.

- Q. Now, Mr. D. A. Hulcy, accounting witness for the Company, who has heretofore testified, has told us that all of the ordinary costs entering into what is known as going value have been paid in the past as operating expenses. Does your examination of the books bear out that statement?
- A. Yes; that is substantially true; practically all of such expenditures have been charged to operations.
- Q. And the amounts you show on this page for New Business advertising salaries, New Business soliciting and commissions, Other New Business labor, Advertising supplies and expenses, and New Business supplies and expenses, are all items which in whole and in part are connected with that type of expense, are they not?
  - A. I think so.
    - Q. What do you show on page 9-A?
- A. On page 9-A I have scheduled the Texas-Oklahoma Gas Sales Adjustment, concerning which I testified this morning. This schedule shows by accounting period the gas produced or purchased in Oklahoma, and shows the gas sold in Oklahoma; and thereby determining the net gas sold in Texas neglecting line loss. In that connection, I would like to make two statements in connection with this [fol. 2623] schedule: One, is the storage in Petrolia Field was adjusted by us to the Oklahoma gas, it being our information that it was in its entirety, or practically so, Oklahoma gas.

Q. That is, gas taken from Lines H and 2nd H?

A. That is right. I understood that to be true; that is the information we had; and it is in conformity with the testimony of Mr. Hulcy that I heard at this hearing, which testimony was given prior to the preparation of this schedule. However, I do understand now, from the testimony of a later witness, that there may be a small part of this gas which comes from Texas; but we have adjusted it as being Oklahoma produced gas. Now, that, I think, is offset, if there be some Texas gas in it—more than offset by our handling of the line loss. We have not charged any line loss to Oklahoma. So we determined the net gas sold in Texas neglecting line loss and subject to the adjustment for the Petrolia Field gas. Then we show the average sale price for Texas gas, and apply that, and determine the value of the excess gas sold at the Texas average price.

Then, we deduct Compression and Transmission expense on net gas sold in Texas neglecting line loss, and determine our final figure that goes to the credit of Oklahoma operations.

Q. Now, as shown on this sheet, the totals for gas sold in Oklahoma by years for the periods shown are fairly constant, are they not?

A. That is true.

[fol. 2624] Q. That is, they range from the last twelve-months period in 1934 from 1,146,367 to 1,431,703 back in 1909?

A. That is correct.

Q. But the gas purchased and produced in Oklahoma has a high, as shown by your exhibit, in 1929 of 8,662,760, steadily decreasing by years in every year down to 1,424,251 for the twelve months period shown in 1934; is that correct?

A. That is correct.

Q. In other words, this schedule shows that the gas purchased and produced in Oklahoma, falling off as it has rather rapidly, will, from this time on, hardly be sufficient to take care of the gas sold in Oklahoma; isn't that right?

A. If we are to accept the trend reflected or shown by the books of the Company as scheduled here, then it seems that within a short period of time the production and purchases in Oklahoma will hardly be sufficient to meet Oklahoma requirements.

Q. What are the total amounts of adjustments that you

have made, as shown on this page?

A. I testified to that this morning, but I will be glad to repeat it. The adjustment for the accounting period, March 31, 1934, \$62,234.07.

Q. That is for the last period in 1934, isn't that right?

A. That is for the twelve months accounting period ended March 31, 1934. Now, for the calendar year 1933, \$29,617.92; 1932, \$342,429.94; 1931, \$554,766.20; 1930, \$1,-[fol. 2625] 213,262.91; 1929, \$1,655,550.49.

Q. In other words, these amounts represent the credits you gave to Oklahoma operations as against the Texas sched-

ules?

A. As against the Texas schedules, yes.

Q. Yes. And the average sales prices which run across this sheet for Texas represent the actual sales price minus the cost of compression and transmission expense?

A. That is true. The average price shown there has been applied to the volume, and immediately under the line for the average price we have determined the amount based upon the application of the average price to the volume, and from that determination we have deducted compression and transmission expense on net gas sold, thereby finding on the last line the amount that we have adjusted.

Q. What was the amount of the compression expense and

transmission expense?

A. For the respective periods?

Q. Yes.

A. For the twelve month accounting period ended March 31, 1934, \$6,733.96; for the calendar year 1933, \$3,305.16; for 1932, \$34,766.45; for 1931, \$69,583.78; for 1930, \$172,731.19; for 1929, \$211,219.17.

Q. Is there any other additional explanation which you

desire to make concerning this sheet?

A. I don't think there is.

[fol. 2626] Q. What do you show on page 10, just follow-

ing?

A. On page 10 we show a detail of producing expenses applicable to Texas operations, for the calendar years 1933, 1932, and 1931, and the twelve-months accounting period, March 31, 1934. We have shown these expenses as classified on the Company's books for these respective periods, and the total has been carried forward to sheet one of this exhibit.

Q. Make your explanation now of page 11—the final sheet.

A. On page 11, we have shown our determination of the book cost of our determined Texas properties of the Lone Star Gas Company, showing the balance as of December 31, 1931, and showing the net additions from January 1, 1932 through March 31, 1934—I mean the public service property of the Lone Star Gas Company; and then I show the total as at March 31, 1934.

Q. That total is in what amount?

A. \$44,053,612.30.

Q. Now, on this sheet where you show allocation in va-

rious places, how did you determine the per cent?

A. Well, we just adopted our best judgment in the matter, and made a straight fifteen per cent application of certain properties as being Oklahoma properties. On other items not subject to allocation or proration, we have attempted to [fol. 2627] segregate the cost of these Texas properties from

Oklahoma properties. We have in this schedule, as testified to this morning by me, the line that does come through a certain section of Oklahoma, which for distance was some forty miles; we have not eliminated the cost of that forty-mile stretch from the figures shown here.

Q. The allocation is applied only to the ones indicated on page 11, such as Dallas Machine Shop, General Office Build-

ing, and such things as that?

A. That is correct.

Q. There is no allocation in the case of the other items?

A. That is correct.

[fols. 2628-2643] Q. Now, have you, from your investigation of the Company's books and records prepared a report other than the one introduced heretofore, and known as Exhibit 4, bearing on the properties as a whole?

A. I have.

Q. Will you produce that report? (Witness hands reports to counsel). The report to which you have just referred is entitled "Report on Special Investigation of Records of Lone Star Gas Company—March 31, 1934," is it not?

A. That is correct.

Mr. Fitzhugh: We submit the exhibit just identified by the witness in evidence.

[fol. 2644] (Thereupon the document above referred to, except pages 24 and 25, was marked as Plaintiffs' Exhibit No. 5.)

Q. Is there any explanation that you need to make as to

page 1 of Exhibit No. 5?

A. Except to say that page 1 shows our determination of revenues, expenses and net earnings before providing [fol. 2645] for depreciation, depletion and Federal income taxes for the calendar years 1927 through 1933 and the twelve-month accounting period ended March 31, 1934. The determination made by us shows a comparable figure to that determined by the company, some seven thousand

dollars in excess, made up of miscellaneous adjustments that were made dealing principally with the method of handling inventory adjustments. In prior years the company had not been making these inventory adjustments, and we believed, to make all years comparable, that we should not make it in the more recent accounting period, so for the calendar year 1933 our net earnings as described amount to \$7,716.44 more than the net earnings shown by the company.

Mr. Griffith: When you say "the company," Mr. Phillips, you mean as disclosed by Mr. Hulcy's exhibits in this case.

A. And the books of the company—the exhibits sponsored by Mr. Huley and the books of the company.

Q. Now, the figures shown for the twelve-month period in 1934 in your Exhibit No. 5 for net earnings—I am talking about the twelve months ending—

A. March 31, 1934.

- Q.—March 31, 1934, is in the amount of \$4,386,294.24. That compares with the figures shown for the similar period in your Exhibit No. 4 of \$4,416,571.74. What would that seem to indicate as to the profitableness of the Oklahoma business as contrasted with the profitableness of the Texas business?
- A. Well, these determinations show that a portion of the [fol. 2646] Oklahoma business is not profitable.
  - Q. At least, it was not for that calendar year?

A. That is correct.

Q. And the same was true for the twelve months ended December 31, 1933, was it not?

A. That is correct.

Q. Now, if the Railroad Commission in arriving at its order based its findings upon operating expenses and revenues on the year 1931 for the combined property, it would have by so doing have been more liberal with the company than it would have been if it had used the Texas properties only, would it not?

A. To an extent. I would not state that as a positive fact, because the 1931 earnings as determined by me to disclose some small earnings for Oklahoma in 1931.

Q. But if, instead of the year 1931, the Railroad Commission had been basing its findings on 1933 or 1934 amounts as shown in your columns, a decided advantage would be given the company by considering the whole properties, would it not?

A. That is correct.

Q. Now, will you turn to the next sheet? Now, what do you show on the sheets shown in your exhibit as page 2 and page 3?

A. We show gas sales of Lone Star Gas Company by accounting periods represented by calendar years 1927 [fol. 2647] through 1933 and the twelve-month period ended March 31, 1934, broken down in respect to domestic and industrial sales to affiliated companies, to other companies, field sales and miscellaneous industrial sales, showing on this summary the volume, the average price, and the amount in respect to each of the periods and in respect to the classification, concluding this summary with a total of gas sales showing domestic and industrial separated and then the grand total by volume, average price, and amount by respective accounting periods.

Q. Now, the trend as shown on these sheets in industrial gas sales as between 1932 and 1933 works out about the same as it did on the industrial sales in Exhibit 4, does it not—that is, the industrial sales are fairly even through that period?

A. That is in respect to the periods 1932 and 1933. [fol. 2648] Q. In 1934 industrial sales picked up a little bit, did they not?

A. That is correct.

Q. And the domestic sales for the combined properties, as shown in this exhibit, in 1932 showed an amount of \$6,653,160.92, and dropped down in 1933 to only \$5,583,008.07; is that correct?

A. That is correct.

Q. In other words, while the industrial sales were staying even or starting up slightly, the domestic sales were still falling off in those periods?

A. That is correct. The domestic sales were falling in that period; however, there was a slight decrease in the

industrial sales for that period.

Q. What explanation do you need to make about page 4?

A. Page 4 is a statement of the company's miscellaneous non-operating revenues. That is to say, revenues from cottage rentals, office building rentals, farm rentals and so forth, for the calendar years 1927 through 1933 and for the twelve months accounting period ended March 31, 1934, showing these items in detail and showing the total that

was carried forward to the control sheet, being page 1 of Exhibit 5.

Q. Now then, make any necessary explanations for page 5.

A. Page 5 sets forth gas purchased for the periods covered by our accounting study—that is, for the calendar years 1927 through 1933, and for the twelve months accounting period ending March 31, 1934, showing the total [fol. 2649] gas purchased in thousand cubic feet, and the amounts and the average price for each of the periods, and showing a breakdown representing the portion that is purchased from wells owned by others, and the royalty gas purchased and the gas storage. Each of these classes which go to make up the total are likewise shown in respect of thousand cubic feet, average price and amounts.

Q. Where, under the gas storage, you show an average price of ten cents per thousand cubic feet, why did you ap-

ply that price of ten cents?

A. Well, that is a determination that was made by the company and it is one which has been constantly applied to the storage gas, and we made no contrary determination, because so many elements would go into it that we did not feel it was far enough off to justify an attempt to correct that figure, if it needed correcting.

Q. Now, this gas was put in at a price of ten cents and

taken out at that price, wasn't it?

A. It was.

Q. So over a period of years, it would not make any difference what price they had it in there for?

A. No difference at all.

Q. What do you show on page 6?

A. On page 6 we show for the calendar years 1931, 1932, 1933 and for the twelve months accounting period ended March 31, 1934, gathering expenses of the Lone Star Gas Company, broken down in respect to operation and maintenance and showing the classification under each of those [fol. 2650] captions, and these classifications are the classifications employed by the company.

Q. And page 7 is a continuation of the same thing, is it

not, for the other years?

A. Page 7, in addition to gather expense, includes also producing expense for the years 1927, 1928, 1929 and 1930, with the exception of repairing and cleaning wells, and abandoning wells which have been eliminated in the final summary, and shown separately as producing expense.

The company's records for these periods did not have a complete separation of producing and gathering system expenses.

Q. On page 8 you show the detail for compressing sys-

tem expense, do you not?

A. For the same periods, yes.

Q. Is there any explanation necessary for that sheet?

A. I don't think so. It is a detail of the expenses included under that caption, and carried forward to the general statement and classified in accordance with the company's classification.

Q. Now, on pages 9 and 10, you show the transmission

system expenses, do you not?

- A. I do, showing it on page 9 for the calendar years 1931, 1932 and 1933, and the twelve months accounting period ended March 31, 1934, the detail of those expenses on page 10 showing the detail of transmission system expense for the calendar years 1927, 1928, 1929 and 1930. This schedule was broken up or rather not made as one schedule, for [fol. 2651] the reason that the company's classification of accounts changed.
- Q. Now the sheets here are detailed sheets, giving totals and which totals are all carried forward on to page 1, are they not?

A. That is correct.

Q. Now we come to page 12. Well, I believe that sheet is

self-explanatory, is it not?

A. It is, It is a detail of general expenses as classified on the books of the company for the years 1927, 1928, 1929 and 1930, and a similar classification being found on page 11 for the years 1931, 1932 and 1933 and the twelve month accounting period ended March 31, 1934. Again we made two schedules in order to preserve the company's classifications in respect to the different periods.

Q. And on page 13 you show, do you not, the producing

expenses detail?

A. Yes, for the years 1931, 1932 and 1933 and the twelve months accounting period ended March 31, 1934.

Q. What do you show on page 14?

A. On page 14 we show the public service property of the Lone Star Gas Company as at December 31, 1931, showing the description of the property on the left of the schedule, and in the first money column showing our determination

of book cost and in the second money column showing our audit adjustments, and in the third column showing the company's book costs—that is, the book costs reflected by [fol. 2652] the control ledger of the company. In the fourth money column we show the increase over book costs by company's revaluation, and in the final column we show the total per books of the company, which includes its book costs and its revaluation.

Q. What was the reason for the audit increases or decreases made by you, as shown in the amounts reflected in

your second money column?

A. Well, in some cases it represents merely a change in classification. To illustrate, on the one hand we decreased the gathering system property by \$66,167.50, which was offset in an increase in transmission system property in a like amount. The other items or some of the other items represent adjustments made by us that increased the figures shown by the companies books, one such adjustment being for certain expenses incurred in connection with drilling during the earlier years of our examination, that the company charged to expense and that we capitalized. The net result of our adjustments was to increase the figures shown by the company's books some \$305,000, as reflected by this schedule.

Q. What do you mean by the increase by company's revaluation, in the amount of \$18,071,233.99?

A. Well, I mean that the company, some years ago, made a valuation or a revaluation of its properties by appraisal, and the determination made at that time was in excess of the company's book costs, so they spread the difference or the increase on their records.

Q. What was the purpose of putting that revaluation [fol. 2653] or the marked up figures on the books?

A. I don't know that I could answer that, Mr. Fitzhugh; I could only assume what the purpose of it may have been.

Q. Well, what would be the usual reason for writing up the value of the property on the books? What would be the

accounting significance of it, I mean?

A. Well, that is an ordinary practice, as a matter of fact, in all lines of business, to have appraisals made and to give effect to it on the books, whether it be an increase or a decreased determination, and the purpose of it is usually to bring the determined value on to the books for account-

ing purposes in the use of property. Whether or not there was some other purpose in mind, I don't know.

Q. On page 15 what do you show?

A. We show a summary of the leases of the Lone Star Gas Company as shown by its books, giving effect to our adjustments and showing our adjusted book costs, increase by adjustments and the company's book costs.

Q. None of your totals there-

A. —Or, I should have said, decrease by adjustments in respect to leases.

Q. None of your totals as to book costs reflect depletion

of gas wells?

A. No sir, we have used the company's book cost and have not decreased any account by the amount of the accrued depreciation or depletion.

Q. The totals do include all delayed rentals, do they not?

[fol. 2654] A. I think so, yes.

- Q. And all of the cost of gas well construction, where wells were acquired already developed on leased properties?
  - A. Yes, that is correct.

Q. What do you show on page 16?.

A. On page 16 we show a summary of the production system property, gas farms of the Lone Star Gas Company as at December 31, 1931, showing our adjusted book cost, the increases we made by adjustments, and the company's book costs or costs as reflected by its books, and the increase by company's revaluation and the totals shown per the company's books, to which we add the completed construction carried in work in progress account at the end of the period. Then we have the breakdown below the totals there, that shows the adjusted book cost of the gas farms exclusive of completed construction, showing the amount that represents investments in leases or lands, including purchased wells, and another amount for well construction; another amount for equipment and another amount for engineering and other overheads which were capitalized.

Q. What is shown on page 17?

A. On page 17 we show a summary of the Lone Star Gas Company's gathering system property as at December 31, 1931, showing the property in respect to fields, and showing our adjusted book cost and the increase by the company's valuation or revaluation, and the total by the company's books, in respect to each field and the totals for all fields.

[fol. 2655] Q. On page 18 you show the Petrolia field account?

A. That is correct.

Q. Will you explain this sheet?

A. This is the Petrolia field account of the Lone Star Gas Company, as at December 31, 1931, showing the several items of property that are included in the account, showing revaluation that was spread on the books at December 31, 1925, and December 31, 1928, and the total of such revaluation and the total in the account, and then we do submit a reconciliation of our determination of the account as shown by the company.

Q. Take up the next page, please sir, page 19.

A. Page 19 is a summary of compressing station property of the Lone Star Gas Company as at December 31, 1931, showing the adjusted book cost, the increase by company's revaluation and the total per the company's books.

Q. On page 20 you show the transmission system prop-

erty, pipe lines and equipment?

A. On page 20 we have a summary of transmission system. property, pipe lines and equipment of the Lone Star Gas Company as at December 31, 1931. This summary shows the property by designated systems, and the information carried across the schedule is the adjusted book cost in the first column; increase by company's revaluation in the second column; the total per the company's books in the third column, and from that point on is a breakdown of the property, tying into the controls of the first three columns, the breakdown being in columns as follows: First column for [fol. 2656] the rights of way. Second column, lands and leaseholds. Then we have the lines separated in three columns to represent pipe in the first of the three columns, the second of the three columns fittings, and the final of the three columns is construction. The next column represents measuring station structures. The next column, other structures. The next is measuring station equipment and the next, other equipment. The next, engineering and interest and other overheads. Now, that is shown in respect to each of these systems, and the total is brought down on the final line and we have added an undistributed item representing completed construction in the Work In Progress Account, which had not been classified in respect to the several items of property.

Q. What do you show on page 21?

A. On page 21 we show the real estate of the Lone Star Gas Company as at December 31, 1931, showing the adjusted book cost, the increase by company's revaluation, and the total by the company's books in respect to the general office building site, the Dallas machine shop site, the vacant property, and property sold to Dallas Gas Company, on which the revaluation was not removed from the books as at December 31, 1931.

Q. On page 22, you show a summary of the public service

property of the company?

A. Yes, on page 22 we show a summary of public service property of the Lone Star Gas Company, showing the property in respect to classifications for the years 1927 through [fol. 2657] 1932, and showing only the total for the period ended December 31, 1933, and the period ended December 31, 1934, and also showing the—

The Court: Did you say December 31, 1934?

A. I didn't intend to Judge; I should have said, March 31, 1934.

The Court: All right.

A.—and showing also the totals for the other years, that is for 1927 through 1932, to which is added on the second line from the bottom, the revaluation per the books of the company and then we find the grand total by years.

Q. What do you show on page 23?

A. On page 23 we show a summary of the depreciation reserve for the Lone Star Gas Company from January 1, 1927, to December 31, 1933, both inclusive. We show in the summary the depreciation at the beginning of each year—that is, the reserve for depreciation; the depreciation set up for each year; the net charges to the reserve for each year, and the balance per the books at the end of each year for the years referred to, being 1927 through 1933, and showing this information in a total amount and then showing it in respect [fol. 2658] to the following classifications of property: drilling tools, production system property, transmission system and gathering system property, compressing station property, telephone and telegraph system property, automotive equipment, Dallas machine shop, general office building,

office furniture and fixtures, tools and construction equipment.

[fol. 2659] Q. When we quit, Mr. Phillips, you were explaining the summary of your depreciation reserves on page 23, I believe?

A: I think I had just completed that explanation.

Q. Now, what does the total in your first column of \$15,-695,413.88 represent?

A. That represents the credit balance in the reserve for depreciation account, as shown by the Company's books as of December 31, 1933, except for the reduction of 5½ per cent on automotive equipment, representing the portion of automotive equipment determined to be non-public service property—

A. We have excluded in our figures here for reserve  $5\frac{1}{2}$  per cent of the depreciation reserve on automotive equipment, inasmuch as the company has determined  $5\frac{1}{2}$  per cent of the automotive equipment to be used in the non-public service end of their business.

Q. In other words, the Company has been putting aside money in some amount all the time it has been in operation for the purpose of taking care of depreciation requirements, and the amount that now shows in the depreciation reserve which the Company has not found necessary to

draw upon, is in this fifteen million amount?

A. Well, the reserve for depreciation in the amounts [fol. 2660] stated represent the accumulated balance in the reserve account. It does not necessarily follow that at the time you make a credit to the reserve you actually set aside that much in dollars and cents, because oftentimes the reserve may be invested in property or other items in the Company's balance sheet. It does not mean that much in dollars and cents has been set aside; but that that much has been set aside and charged to the operations in respect to these classes of property.

Q. But this fifteen million amount is still in depreciation reserve after all deductions for repairs and replacements

have been made?

A. After all have been made and charged to that account, yes, sir.

Q. What is the purpose of this depreciation reserve?

- A. Well, the purpose of a depreciation reserve is generally considered to be a measuring stick for the using up of property. To illustrate that, if you buy an item of property that costs a thousand dollars, and you use the straight line method of depreciation—and by straight-line method, I mean writing off the sum in equal annual installments—and assuming the property will be useful for ten years, you would write off one hundred dollars per year on that equipment of one thousand dollars. At the end of three years, the purpose of this account is to measure off the portion of [fol. 2661] the property that has been used up or worn out. That is the primary purpose of a depreciation reserve; Also, having in mind, that replacements and minor repairs will be taken care of out of the reserve that is set up from time to time.
- Q. Now, from the correct accounting standpoint, if the Company has been setting aside the correct amounts for the wearing out of property which has occurred thus far, this credit balance in depreciation reserve of fifteen million dollars plus represents an actual wearing out that has occurred, but the replacements and repairs on which property have not yet become necessary; that is, actual wear would have taken place, even though replacements and repairs had not been made?

A. That is what the depreciation account is supposed to

represent—the reserve.

Q. What was the amount actually set aside to the depre-

ciation reserve for the year 1933?

A. The depreciation set up on the books of the Company for the year 1933 in respect to the properties classified here amounted to \$1,882,333.41.

Q. Now, the charges actually made to the reserve for that same year were in what amount?

A. In the amount of \$335,736.55.

Q. And that is the amount that they actually took out for that year for replacements and repairs; isn't that right? [fol. 2662] A. That is correct.

Q. Is there any other explanation that needs to be made as to this sheet?

A. I don't think so. I have already explained the five and a half per cent allocated to automotive equipment.

The Court: Is there any reason why the Company arrived at that 51/2 per cent for automotive equipment; or is

that just an arbitrary figure set up?

A. I don't think it is arbitrary in the ordinarily understood sense. I believe it to be reasonably accurate. In other words, based upon such information as we had in respect to automotive equipment, we felt that 5½ per cent of the automotive equipment allocated to non-public service operations was a reasonable amount. It could be six or five. It may not be entirely accurate; but in my opinion, it is reasonably accurate.

The Court: Will you tell me, if you know, how they arrived at that 5½ per cent; or if you don't know how they arrived at it, why do you think it is reasonable?

A. Well, we have a detail of the automotive equipment. [fol. 2663] We know that that equipment is used substantially in connection with the operations of the public service property. We know, on the other hand, that they have some gasoline operations and some oil operations, and it just occurs to us, based upon our general understanding of the non-public service property owned and operated, that that is reasonable.

- Q. Now, have you made an examination of the exhibit introduced and sponsored here by the witness D. A. Hulcy, known as Defendant's Exhibit 31?
  - A. I have made some examination of that exhibit.
  - Q. That is Mr. Hulcy's appraisal of gas reserves?
  - A. Yes.
  - Q. Do you have a copy of that exhibit before you?
  - A. Yes; I have a copy of it.
- Q. I will ask you, Mr. Phillips, if the method used in finding the present fair value of net gas reserves as calculated by Mr. Hulcy is not what accountants ordinarily understand and mean as being a capitalization of future earnings?

A. Well, that is my accounting understanding of it, and I believe it is the general understanding of accountants generally.

Q. Is there any difference in this method, so far as it represents a capitalization of earnings, in adopting an as[fol. 2664] sumed field price for gas through the years as gas is withdrawn, and applying those prices for gas to find the present value as found by Mr. Huley, and in a method of finding the value of the Company's property as a whole based upon the earning value of the properties, taking into consideration the price being obtained by the Company for

gas sold at the city gate?

A. Well, I will say that I can see not a great deal of difference in the two applications, because as I understand Mr. Hulcy's determination here, he has concluded that the Company's gas in the field is worth the same price other gas in the field not owned by the Company is worth and can be purchased for. Now, if there is any profit in acquiring that gas, that is the very element that has been used to measure the values of these reserves. So, it seems to me, the application to the city gate would be very similar, because the gas is worth so much at the city gate, and if there is any profit in bringing it there over a period of years and using it, the same elements would be applied in the determination there as have been applied, as I understand it, To me it represents a capitalization of in this exhibit. future earnings.

Q. Mr. Phillips, Mr. Hulcy in testify-heretofore stated in effect that if the loan now outstanding and due to the Lone Star Gas Corporation in the amount of about \$17,-[fol. 2665] 600,000—if that loan were replaced by capital stock, and by the issuance of capital stock in that amount, that the interest reduction which would ordinarily be applied in making out the Company's income tax return, would no longer be applicable; are you familiar with that statement?

A. Yes; I heard Mr. Hulcy's testimony, in respect to that, and I have since read it.

Q. Now, I will ask you, Mr. Phillips, if, taking into consideration the changed law as to filing of consolidated tax returns, and bearing in mind the affiliation that exists between the Lone Star Gas Company and the Lone Star Gas Corporation, if Mr. Hulcy's assumptions as to elimination

of the interest from Federal Income Tax calculations as to the whole proposition in its entirety are correct?

A. Well, treating the matter over all, it really has no effect; it is merely a wash-out, so to speak. That is, one benefit will be offset by a loss on the other hand. By that, I mean this: If the Lone Star Gas Company were permitted to take the item as an interest deduction, then the receipt of that interest in the hands of Lone Star Gas Corporation would be subject to tax; while if the Lone Star Gas Company pays out the sum to the Lone Star Gas Company pays out the sum to the Lone Star Gas Company would not get the benefit of the deduction; on the other hand, the Lone Star Gas Corporation would not have to pay taxes on the amount received.

[fol. 2666] Q. So the whole thing, bearing in mind the affiliation of the companies is a wash-out?

A. That is the way I look at it.

Cross-examination.

## Questions by Mr. Griffith:

Q. Mr. Phillips, when did you first present yourself at the office of the Lone Star Gas Company for the purpose of examining its books, records, and accounts?

A. Sometime in December, 1931, I believe.

Q. Following that presentation were you afforded every access to the books, records and accounts of the Lone Star Gas Company?

A. The Lone Star Gas Company from the outset—its personnel did cooperate with us in our examination of the books and records of the company.

Q. And you were afforded access to every book, record, and account of the Company which you requested in connection with your report?

A. I am sure I have never made any request of the personnel of Lone Star Gas Company in respect to the examination of the Lone Star Gas Company's books which has been refused.

Q. And the access to the books which you initially had has continued up to the time of the hearing of this case?

A. That is true with minor exceptions. I believe we did [fol. 2667] ask for some statements, maybe not in direct reference to the books. I will say this: We kept a memoran-

dum of it, which we have in our files at the hotel; but answering your question as to whether we were afforded every opportunity to examine the books of the Lone Star Gas Company, my answer is "yes", we were."

Q. Are the books, records, and accounts of the Lone Star

Gas Company well kept?

A. I think they are well kept.

Q. Now, in connection with your direct testimony you made a reference to Mr. Hulcy's determination of amounts available for depreciation and return for some certain 12-months accounting periods?

A. I don't remember whether I made reference to Mr.

Hulcy's determinations or not.

Q. Didn't you say that for the year 1933 you determined that the gross earnings of the Company were \$7,000 in excess of Mr. Hulcy's statement?

A. I had specifically in mind Mr. Hulcy's books, but it is

also true in that case of Mr. Hulcy's exhibit.

Q. Have you examined Defendant's Exhibits 5, 6, 8, and 9 in this case?

A. Yes; to some extent, I have.

Q. Do you have copies of them with you?

A. I do have.

[fol. 2668] Q. Are they marked so that you can identify them?

A. Yes.

Q. Now, in Defendant's Exhibit 5,—that is for the 12 months ended December 31, 1931, is it not?

A. Exhibit 5, that is for the 12 months ended December 31, 1931.

Q. Now, Defendant's Exhibit 6 is for the 12 months ended December 31, 1932?

A. That is correct.

Q. And Defendant's Exhibit 8 is for the 12 months ended December 31, 1933?

A. That is correct.

Q. And Defendant's Exhibit 9 is for the 12 months ended March 31, 1934?

A. That is correct.

Q. Now, those four accounting periods,—that is for the calendar years of 1931, 1932, and 1933, and the 12 months ended March 31, 1934,—are set forth in your exhibit—that is Plaintiff's Exhibit 5, are they not?

A. That is correct.

Q. Will you refer, please, to page one-

A. Four or Five, may I ask?

Q. Five. Refer to page 1 of Exhibit 5.

A. I have it.

Q. Will you take Mr. Hulcy's Exhibit No. 5 and by making reference to page of Defendant's Exhibit 5, tell me whether you and Mr. Hulcy are in substantial accord as to [fol. 2669] net earnings before providing for depreciation, depletion and Federal taxes?

A. We are.

Q. For the year 1931?

A. We are.

Q. Is there any difference at all as between your determination and the determination by Mr. Hulcy?

A. There is a small difference between Mr. Hulcy and ourselves with respect to the year 1931. \* \* The difference aggregates \$1146.89.

[fol. 2670] Q. That is what might be called a negligible difference considering the amounts involved?

A. Very negligible.

Q. Will you refer please to Defendant's Exhibit 6, and then to page 1 of Plaintiff's Exhibit 5. What difference is there between yourself and Mr. Hulcy as to the determination of the net amount available for Federal taxes, depreciation, and return for the 12 months ended December 31, 1932?

A. 1932, there is a difference, I believe, of \$8,134.76. Q. Do you now recall where that difference arises?

- A. No; I don't. It had to do—the principal item in that had to do with some second-hand material, I believe, that was disposed of; but as to the entire amount I am not prepared to answer.
- Q. As a matter of fact, didn't the difference arise in the sale of same second-hand material which you determined should be charged to non-public service property?

A. I think that is correct—substantially all of it.

Q. But even the item of \$8,000 for the year 1932 would not be a material amount, compared to the total amount available [fol. 2671] for Federal taxes, depreciation and return?

- A. Not at all.
- Q. But it is a question upon which the minds of reasonable men might differ, I take it?
  - A. That is true.
- Q. Will you refer, please, to Defendant's Exhibit 8 covering operations for the 12 months ended December 31, 1933; and then also refer to page 1 of Defendant's Exhibit—I mean Plaintiff's Exhibit 5?
  - A. I have it.
- Q. Is there any substantial difference as to the determination made by Mr. Hulcy and yourself respectively as to the net amount available for depreciation, Federal taxes, and return for the twelve months period ended December 31, 1933?
- A. There is no substantial difference. There is a difference of \$7,716.44.
- Q. And that is the amount to which you have heretofore referred?
  - A. That is correct:
- Q. Will you refer please to Defendant's Exhibit 9, and also to your summary sheet on page 1 of Plaintiff's Exhibit 5?
  - A. I have it.
- Q. Is there any substantial difference for the accounting period for the 12 months ended March 31, 1934?
  - A. There is not.
- [fol. 2672] Q. And between Defendant's Exhibit 9 and your own determination set forth on page 1 of Plaintiff's Exhibit 5?
- A. There is not a substantial difference. There is a difference of \$7,537.31.
  - Q. I say it amounts to approximately \$7500?
  - A. \$7537.21.
- Q. Again, Mr. Phillips, that is not a substantial difference as between your own determination and what the books actually show and the report made by Mr. Hulcy in Defendant's Exhibit 9?
  - A. It is not.
- Q. Do you happen to recall at this time how those differences arose?
- A. You should keep in mind that 1933 items to a considerable extent come forward in the determination of the 12 months period ended March 31, 1934, inasmuch as in the de-

termination at March 31, 1934 you have nine months of 1933 operations; so the items are very similar to the items in respect to 1933, the principal one being the inventory adjustment.

- Q. In other words, there is a nine months carry over from 1933 operations into the 12 months periods ended March 31, 1934?
  - A. That is correct.
- Q. Mr. Phillips, you testified before the Railroad Commis-[fol. 2673] sion in Gas Utilities Docket No. 75?
  - A. Yes, I did.
- Q. Did you present in connection with your-testimony any segregation of Texas property and business?
  - A. I did not.
- Q. Did any other witness to your knowledge present any such segregation of property or business?
  - A. No; no other witness to my knowledge.
- Q. Was any such segregation of property or business made in connection with the evidence and testimony presented at that hearing?
  - A. I have no knowledge of it.
- Q. Now, Mr. Phillips, your exhibits—that is Plaintiff's Exhibits 4 and 5 in this case, are based upon what purports to be actual revenues and expenses of the Company?
  - A. That is correct.
- Q. You have made certain adjustments to the capital account and to operating accounts?
  - A. That is correct.
- Q. In so far as the revenues are concerned, you have attempted to base those exhibits and reports upon the actual [fol. 2674] revenues of the Company, rather than some other revenues?
  - A. That is correct.
- Q. In the preparation of those reports did you compute the revenues on the basis of 40 cents for domestic gas at the city gate?
- A. Yes; those revenues were computed at the rate of 40 cents, which was the rate the Company collected.
- Q. At no place in either one of these exhibits did you attempt to give effect to the Commission's order fixing and prescribing a 32-cent city gate rate for domestic gas?

A. That is correct; I did not.

Q. Will you please refer to Plaintiff's Exhibit 4. You have stated on page 1, which is the summary page of Plaintiff's Exhibit 4, a net amount available before providing for depreciation, depletion and Federal Income taxes?

A. That is correct.

- Q. I will ask you if you mean the word "depreciation" as inclusive of what has been referred to in this case as "amortization" as well?
- A. Well, it probably would be, yes, because while I do not recall having heard any testimony with respect to amortization, what depreciation should cover is lessening in value of property.

[fol. 2675] Q. As well as its ultimate retirement?

A. That is right.

Q. Or abandonment or removal?

A. That is correct.

Q. And in its broadest sense, the term depreciation would include, possibly, both depletion and amortization?

A. Yes, especially in respect to natural resources.

Q. And properties of this kind and character?

A. Yes.

Q. Such as the Lone Star Gas Company has?

A. That is correct.

Q. Now, on page 1 of Plaintiff's Exhibit 4, you have set forth the net amount available for depreciation, depletion, and Federal Income Taxes for a period of several years?

A. That is correct.

Q. Or for several accounting periods—as applied to the Texas properties of Lone Star Gas Company?

A. That is correct.

Q. Now, can you give me in the same manner what you have set forth on page 1 of Plaintiffs' Exhibit 4 the amounts available for the twelve months period for the Texas properties, the corresponding amounts that would be available for the Oklahoma properties?

A. I think I have the work-sheet on that. It may take

[fol. 2676] me a little time on that.

Q. I don't desire the information for any period prior to January 1, 1931, Mr. Phillips.

A. I have it worked out, Mr. Griffith. Yes, I have it right

here.

Q. Well, will you give it for the four accounting periods commencing with the accounting period ended December 31, 1931?

A. You want the net earnings before providing for depreciation, depletion and Federal Income Taxes, in respect to the Oklahoma operations?

Q. Well, I want the balance of the property—the balance of the public service property not covered by your revenues

on page 1 of Plaintiffs' Exhibit 4.

A. For Texas—First, may I read in the total, and then that that we have considered Texas, and then the other item? Will that be satisfactory?

Q. I think that will be satisfactory.

A. The total is \$4,909,171.13; Texas, \$4,758,714.46; the balance, \$150,456.67. That was for the year 1931.

[fol. 2677] Q. In other words, the amount of approximately \$150,000.00 which you have just recited in the record was the amount that under your plan of segregation between Texas and Oklahoma earnings would be available for depreciation, depletion and Federal Income Taxes on the Oklahoma properties and business?

A. That is correct.

Q. Now, will you read comparable figures for the calendar year of 1932, the calendar year of 1933, and the twelve months ended March 31, 1934?

A. The comparable figure for the year 1932 is \$128,-178.93 for Oklahoma operations. May I ask if you want me [fol. 2678] to read the Total and the Texas?

Q. You might as well, since you started in that way.

A. Total, \$5,010,476.49; Texas operations, \$4,882,297.56; Oklahoma operations, \$128,178.93, for the year 1932.

The Court: I am wondering if the witness hasn't one of these slide rule calculators, where he can tell what those percentages are.

Judge Powell: It would be around two per cent, that last figure.

A. Now, for the calendar year 1933 the comparable figures are: Total, \$4,123,796.36; Texas, \$4,185,327.48. The net

loss determined for Oklahoma operations, \$61,531.12; that is a deficiency in respect to an amount available for depreciation, depletion and Federal Income Taxes in respect to Oklahoma operations. The comparable figure for the accounting period ended March 31, 1932, a twelve-month period, \$4,386,294.24 is the total; Texas, \$4,416,571.74; the deficiency in respect to Oklahoma operations is \$30,277.50. [fol. 2679] Q. So for the last two accounting periods, Mr. Phillips, according to the method of segregation that you have pursued, and as reflected by Plaintiffs' Exhibit 4, the Company had a loss on its Oklahoma operations?

A. That is correct.

Q. Mr. Phillips, in the preparation of Plaintiffs' Exhibit 4, how did you determine the percentage of Oklahoma gas which went to industrial and domestic sales in Texas?

A. I made no determination in respect to domestic and industrial sales of Oklahoma gas into Texas. I simply adopted the plan of applying the average price received for all gas in Texas, and giving Oklahoma the full credit for it.

Q. Now, do you know at what time of year the largest proportionate amounts of domestic gas are sold?

A. Well, yes, the larger portions of domestic gas are sold

in the so-called winter months.

- A. At what months during the year is the largest proportion of the gas produced and purchased in the State of Oklahoma transported and sold in the State of Texas?
  - A. I don't have that information.
  - Q. You don't have that information?

A. No, I do not.

[fol. 2680] Q. Did you make use of that information at any place in connection with the compilation of Plaintiffs' Exhibit 4?

A. I did not. I made no particular study of the months

of the year in which deliveries were made.

Q. Now, did you treat gas produced and purchased from the Shamrock Field in Wheeler County, Texas, and transported through the State of Oklahoma and thence back into the State of Texas, where most of the gas was sold as Texas business, in the preparation of Plaintiffs' Exhibit 4?

A. Mr. Griffith, we did not adopt any plan of such determinations. What we did was to take the total gas produced within each of the two States, and we accounted for the

gas based upon that production and purchase, and gave to Oklahoma credit for all of the gas that was produced or purchased in Oklahoma. We really didn't take into account through what pipe lines it was transported, or anything else of that nature.

Q. Now, Mr. Phillips, you have stated in your summary sheets on both Plaintiffs' Exhibit 4 and Plaintiffs' Exhibit 5 that certain amounts were available before providing for depletion, depreciation and Federal Income Taxes? [fol. 2681] A. That is correct.

Q: Are depreciation and depletion proper items of operating expense?

A. I think so.

Q. Is Federal Income Tax a proper item of operating expense?

A. That is a question that is debated by accountants rather extensively, and were you to examine my audit reports in respect to any business you would find that I determine the gross profit on operations as a final figure, and then deduct from it the Federal Income Tax, and show the net as transferred to surplus. I do not include it as an operating expense. It is a debatable question. To illustrate that, the Federal Government itself does not allow, as an operating expense in determining your income for 1932, the income tax you paid in 1933. That is a question that is . very controversial,-I would prefer to answer it that way.

Q. I will ask you the question this way, is there anything net divisible to common stockholders or to preferred stockholders of a corporation prior to the payment of accrual

of final income taxes?

A. No, Federal Income Taxes would have to be provided for out of the net result achieved in order to find that sum [fol. 2682] that would be distributable to stockholders.

Q. In connection with the work which you did in the preparation and presentation of Plaintiffs' Exhibit 4, did you make any determination of the facilities of the Lone Star Gas Company, whether they be pipe lines, or compressor stations, or measuring stations, or any other classification of property which was jointly and/or concurrently used in the matter of the transportation of gas produced, on the one hand, in the State of Oklahoma, or transported from the State of Oklahoma into Texas; and on the other hand, gas produced, and/or purchased, transported and sold wholly within the State of Texas?

A. No, we did not; what we did was to make a determination of the properties physically located in the respective States, as reflected by the Company's books. Of course, there were certain items that we had to make that determination on a percentage calculation; the Telephone System, for example, extends into Oklahoma from Texas; well, we just took an arbitrary percentage, if you are pleased to call it that, of fifteen per cent, and determined fifteen per cent of the telephone system to be physically located within the State of Oklahoma. Now, as to the gas sold, we only concerned ourselves with the gas produced or purchased in [fol. 2683] Oklahoma and sold in Oklahoma, and the balance that was sold in Texas we just computed the sales price on it and gave Oklahoma credit for it; we didn't make any determination in respect to the pipe lines it went through.

Q. From one State to another?

A. No, sir.

Q. Well, would it be fair to summarize what you have just said by stating that in the preparation of Plaintiffs' Exhibit 4 you were controlled by the geographical location of the facilities of the Company located in Texas, on the one hand, and in Oklahoma, on the other hand?

A. In respect to property, I think that is a fair statement.

Q. And it was based upon the geographical location, rather than the use to which the facilities were put?

A. I think that is a fair statement.

Q. In connection with your accounting exhibits—that is, Plaintiffs' Exhibits 4 and 5 you set out at various places the advertising expense of the Company.

A. I don't know whether we have advertising set out or not. I believe we do have it in General Expenses, set out.

Q. Well, it appears at some place in the expenses, does [fol. 2684] it not?

A. Yes, it does.

Q. And it appears upon the Company's books as an annual expense in various amounts for various years?

A. Yes, it does.

Q. Either you or your associates or those working under your supervision, checked the items of advertising expense?

A. Yes, we did.

Q. A great portion of that advertising was newspaper advertising, was it not?

A. A very substantial portion of it.

Q. Was there anything in your examination of the books,

records and accounts of the Company, which led you to believe that that expense was not properly incurred by the Company?

A. No, I think I considered that the expense was prop-

erly incurred by the Company.

Q. And as a consequence, you carried the expense reflected by the books of the Company into your exhibits—that is, Plaintiffs' Exhibits 4 and 5?

A. I did.

Q. Now, do the books, records and accounts of the Company at any place, Mr. Phillips, show the figures which you set forth in connection with sales expenses, revenues or

property in Plaintiffs' Exhibit 4?

[fol. 2685] A. Do the books show the figures that have been set forth in Plaintiffs' Exhibit 4? No, they do not set forth operating revenues and expenses in the sums included in Exhibit 4. Of course, the revenues and expenses included in Exhibit 4 were extracted from accounts that the Company's books do show.

Q. In other words, Exhibit 4, in so far as revenues and expenses are concerned, is a calculation made from that which the books, records and accounts reflect?

A. Yes, it is a determination from what the books, ac-

counts and records do reflect.

- Q. Now, on page 11 of your Exhibit 4 did you include in transmission system property, pipe lines and equipment all of Line A, running from the Shamrock Field through the State of Oklahoma and to the Petrolia Compressor Station?
- A. Yes, all of it is included in this schedule of property, being page 11 of Plaintiffs' Exhibit 4.
- Q. And that would include such part of Line A, I believe was testified to be approximately thirty-five miles in length, which runs through the State of Oklahoma?

A. It would.

Q. Now, what did you do in connection with the tap line, which I believe is Line A-1-4, running from Line A in the State of Oklahoma over into the State of—did I say State of Oklahoma? Running from the State of Texas over into [fol. 2686] the State of Oklahoma and supplying the towns of Frederick, Tipton, Manitou and Mountain Park?

A. I think that we made no change in that line at all—that is, we eliminated nothing from it. We considered the

whole line as Texas property. However, I would like to check that with my breakdown, and be more positive about it, and answer your question later.

Q. Now, Mr. Phillips, refer please to the summary of expenses shown and revenues, as well, shown on Exhibits

4 and 5, respectively.

A. You have reference to the comparative statement of earnings?

Q. Yes, I do, Mr. Phillips, to the summary sheet.

A. Page 1 of each exhibit?

Q. Yes, sir.

A. I have it.

Q. Now, the amount of gas sales shown for the year 1933 on the whole property appears to have been \$7,688,724.10?

A. That is correct, for 1933.

Q. On page 1 of Plaintiffs' Exhibit 4 you make a Texas-Oklahoma gas sales adjustment?

A. That is correct.

Q. But you show gas sales for the calendar year, covering [fol. 2687] the Texas properties, in the amount of \$7,-387,118.42?

A. That is correct.

Q. Now, Mr. Phillips, does the difference between those two figures represent the Oklahoma sales for the calendar year 1933?

A. Only the Oklahoma sales within the State of Oklahoma.

Q. That is, the sales by Lone Star Gas Company in the State of Oklahoma?

A. That is correct.

Q. Regardless of whether the gas was produced and/or purchased in Oklahoma and produced and/or purchased in the State of Texas?

A. That is correct.

Q. In other words, if you refer to the map which has been introduced in evidence and study Defendant's Exhibit 29, you will note that certain sales are made off of Line A, which transports gas from the Shamrock Field in Wheeler County, Texas, to the town of Hollis, Oklahoma.

A. Yes.

Q. And certain other sales are made off of Line A to the towns of Frederick, Tipton, Snyder, Mountain Park, and Manitou.

A. Yes.

Q. Were all of the sales which were actually made within

[fol. 2688] the State of Oklahoma treated as Oklahoma sales in connection with the preparation of Plaintiffs' Exhibit 4?

A. That is true; all of the sales that were made within the State of Oklahoma were considered as Oklahoma sales, whether the gas came from Texas or from gas in Oklahoma.

Q. And that was regardless of the source or origin of

the gas supply?

A. That is correct.

[fol. 2689] Q. Now, Mr. Phillips, if we deduct, then, the figure of \$7,387,118.42 appearing on page 1 of Plaintiff's Exhibit 4 from the figure of \$7,688,724.10 appearing on page 1 of Plaintiff's Exhibit 5, do we have the net amount derived by the company from its sales exclusively within the State of Oklahoma?

A. That is correct.

Q. That is correct. Now, referring again to page 1 of Plaintiff's Exhibit 4, how did you segregate the Miscellaneous Operating Revenues for the year 1933 as applicable to the Texas properties?

A. The Miscellaneous Operating Revenues or Non-Oper-

ating Revenues?

Q. Miscellaneous Operating Revenues.

A. We considered the entire sum of \$1,442.91 for the year 1933 as being Texas revenue.

Q. And that is the same figure which appears in the 1933 column on page 1 of your Exhibit 5, is it not?

A. That is correct.

Q. Now, how did you determine your segregation of Miscellaneous Non-operating Revenues for the calendar year 1933 as disclosed by your Exhibits 4 and 5?

[fol. 2690] A. That allocation was based on direct per cottage rentals, farm rentals, telephone pole rentals, as well as electric current, sundry earnings, and royalty interests gas.

Q. Was it based on the geological or geographic location of the income?

A. That is exactly right. If the cottages were within the State of Texas the income was credited to Texas operation.

Q. Conversely, if they were within the State of Okla, home they were credited to Oklahoma operation?

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\* A. That is correct. Now, with respect to office building rentals, I testified this morning to the fact that they were allocated on the General Expenses proration.

Q. I recall that testimony, and it will not be necessary

to go into that again.

A. Those are the items.

Q. So to get the total revenues you have segregated in connection with the Texas properties \$7,423,680.87?

A. That is correct.

Q. And that is to be contrasted with the over-all figure of total revenues shown on page 1 of Plaintiff's Exhibit 5 for the year 1933 in the amount of \$7,728,309.05?

A. That is correct.

[fol. 2691] Q. We next come on page 1 of Your Exhibit 4, Mr. Phillips, to the item of Gas Purchased?

A. Yes.

Q. Now, that appears in detail on page 2 of Exhibit 4, does it not?

A. That is correct.

Q. Now, in tabulating gas purchased by the Lone Star Gas Company for the year 1933 and all other years did you tabulate the gas which was produced solely within the confines of the State of Texas?

A. Produced, or purchased?

Q. Produced or purchased, I mean.

A. We tabulated it according to the confines of the State.

Q. According to the geographic location of the gas well?

A. That is correct.

Q. So, therefore, included in your gas purchased for the calendar year 1933, as set forth on page 2 of Exhibit 4 you included the gas purchased in the Shamrock field of Wheeler County, Texas?

A. That is correct.

Q. And upon that basis you made your segregation of the gas produced in the State of Texas and the State of Oklahoma, respectively?

A. That is correct.

Q. Now, the next item of expense appearing on page 1 of your Exhibit 4 is Gathering Expenses, in the amount of \$95.911.08?

A. That is correct.

[fol. 2692] Q. Do we find a detail of that on page 3?

A. On page 3? We do.

Q. Now, how are the books, records and accounts of the company kept in connection with Gathering Expenses?—can you identify them by fields?

A. We have not accumulated those items on our work

papers by fields.

- Q. Well, what I want to know is how you segregated out \$95,911.08, Gathering Expenses, as applicable to Texas operations, whereas the over-all figure appearing on your summary sheet in Exhibit 5 is \$131,326.29.
  - A. What was that figure for over-all?

Q. \$95,911.08.

A. For over-all?

Q. No, for Texas properties.

A. I am asking for the figure you read into the record for the over-all.

Q. Well, the correct figure—I may have misstated it, Mr. Phillips—is \$131,326.29 for the year 1933.

A. Well, here is how we determined the portion applicable to Texas operations: We found that you had field line labor carried in a separate account for Texas. The same is true of field line supplies and expenses and all other supplies and expenses, damages, maintenance of field lines. maintenance of field structures, maintenance of gas cleaners, changing construction, and other maintenance ex-[fol. 2693] penses. Now, in respect to Field Measuring Station Labor, Field Measuring Station Supplies and Expenses, and maintenance of Measuring Stations, you did not have it segregated as between Texas and Oklahoma. We allocated it on the basis that I will now read into the record: It was prorated on the basis of the percentage of Field Measuring Station Structures and Field Measuring Station Equipment within the State of Texas to the total of such structures and equipment. After making that determination, the sum that was allocable to Texas was added to the direct expenses allocable to Texas as shown on your books, and that which was allocable to Oklahoma was so allocated to your direct expenses, and then these expenses, superintendence labor operating wells, superintendence supplies and expenses, gas wells supplies and expenses, and superintendence of maintenance, those items of expenses were allocated on the basis of the previous determination for Texas, the percentage it represents to the total of all such expenses. Do I make myself clear?

- Q. Well, I think so, Mr. Phillips. I think you certainly intended to. Now, the next item is Compressor Station Expenses, which you determine on page 1 of Exhibit 4 to be \$303,454.78, whereas you show an over-all figure of \$338,433.01 on page 1 of Exhibit 5 as applicable to the over-all operations of the company. How did you make the segregation for your Exhibit 4?
- A. All right. The expenses that I will now read into the [fol. 2694] record were kept separately on your books: changing construction, water system, repairs, pipes and fittings, maintenance of other equipment, engineers and oilers main buildings, other labor, fuel, water, lubricating oils,—those expenses you keep separately on your books—that is, separated as between Texas and Oklahoma. The proration of all other expenses was on the basis of direct expenses in each State to the total of all such expenses, with the exception of repairs to buildings, and repairs to buildings was prorated on the basis of the book cost of the respective properties as compared to the whole.
- Q. Take the next item, Transmission System Expenses, determined over all for the year 1933 to be \$431,520.56, and out of which you have segregated \$374.275.77 as applicable to Texas operations.
- A. All right. The first items we allocated or prorated had to do with all of the expenses shown under Transmission System Expenses in the districts of Gainesville and Vernon. Now, the Gainesville district expenses were prorated on the basis of the ratio of Texas and Oklahoma transmission property, respectively, to the whole, which information was furnished by the engineers. By "engineers" I mean Mr. Freese's firm."
- Q. Well, now, what was the basis for the allocation of property as between Texas and Oklahoma in the Vernon district?
- A. What was the basis of the allocation of property as between Oklahoma and Texas?
  - Q. Yes.

[fol. 2695] A. I don't know that I could answer that question. The only thing I can say is that we requested Mr. Freese by long distance telephone from Dallas to give us his valuation of the properties in this district in respect to properties located in Oklahoma and properties located in

Texas, and we were furnished that information by mail, and we did use that basis.

Q. It was upon the basis of Mr. Freese's allocation of property values in the Vernon district as between Texas and Oklahoma that you made your allocation of expenses?

A. Yes. I have been testifying in respect to the Gainesville district, but the same is true of the Vernon district.

- Q. The Vernon district also extends into Oklahoma as well as being in Texas?
  - A. That is correct.
- Q. You do not have the relative proportions of value of property as determined by Mr. Freese in connection with the Gainesville district as between Texas and Oklahoma similarly for the Vernon district?
  - A. I do have it at my room.

[fol. 2696] Q. Well, now, in respect of the allocations that you made of the Vernon and Gainesville districts, how did you proceed with your segregation of expenses covering Transmission System Expenses?

A. All right. We have this group of expenses, or these items of expenses: Measuring Station labor, Transmission Line supplies and expenses; these expenses were prorated on the basis of the ratio of Texas and Oklahoma Measuring Station Equipment and Measuring Station Structures; that is to say, we took the total within each State and whatever the Texas percentage was to the total, or, rather, the total to both States—whatever the Texas percentage was to both States was our percentage of those two expenses chargeable to Texas—that is, Measuring Station Labor and Transmission Line Supplies and Expenses were prorated on the basis of the percentage of such structures and equipment within Texas.

Q. Well, now, is that the total of such structures as reflected by book cost or Mr. Freese's appraisal, or what?

A. This information, I am quite sure—I would like to reserve my answer on that, because I am not quite positive whether we used present valuation figures determined by Mr. Freese or your book cost. I would rather not answer that question until I check it. It was that basis applied

either to Mr. Freese's determination of value or our book cost, and I think it is our book cost.

Q. Will you do that and advise us definitely in the morn-

ing?

[fol. 2697] A. Yes, sir, I will. I have it in my work papers. Now, the item of Maintenance of Measuring Station Structures was allocated on the basis of the ratio of the Texas Transmission Measuring Station Structures to the whole for both States. Then we have Maintenance of Measuring Station Equipment. That item of expense was prorated on the basis of the ratio of the Texas Transmission Measuring Station Equipment to the total for both States.

Q. Well, now, again, was that on the basis of the book cost or some appraisal figure given to you by Mr. Freese?

A. I am quite confident this is on our determination of book cost. However, I will verify that and answer more positively in the morning. Then we have the items of superintendence inspection labor, other Transmission Systems labor, superintendence supplies and expenses, Measuring Station supplies and expenses, inspection supplies and expenses, superintendence of maintenance, and maintenance of gas cleaners.

[fol. 2698] Q. Was that a direct expense?

A. Those are common expenses.

Q. Those are common expenses?

A. Yes, and the basis of prorating those expenses was this: After we had made all of these other prorations, and added them to the direct expense, exclusive of this group, we of course found a total for Texas and a total for Oklahoma, and it was upon that determination that our ratio was based with respect to these last named items of expense. We made the other allocations about which I have just testified, added the amounts allocated to Texas and Oklahoma direct, and then the percentage of that new total to the over-all total was the percentage we used for the balance of these expenses.

Q. There is nothing, of course, in your Exhibit 4, which discloses this basis of allocation concerning which you are

testifying?

A. Nothing in the exhibit, no sir.

Q. Well now, have you testified as to everything which finally led you to adopt a figure of \$374,275.77 as representing the segregated transmission system expense for Texas properties?

A. Yes, I have.

Q. Except in so far as you have been unable to supply some details, which you say you will furnish in the morning?

A. Yes, except as to whether or not it was on the basis

of book cost or the present value found by Mr. Freese.

- Q. Now, in connection with the item of taxes, other than [fol. 2699] gross production and federal income taxes, did you determine those taxes according to the geographical location of the property, or did you make some proration or allocation?
  - A. I would say in the main those taxes were determined on the basis of geographical location.

Q. Where the tax payments were actually made?

A. That is correct.

Q. In other words, if the tax payment was made in Texas, it was charged against Texas?

A. It was Texas taxes.

Q. And conversely, if the tax payment was made in Oklahoma, it was charged against Oklahoma?

A. Charged against Oklahoma operations, yes.

Q. Now, you say that is true in the main. What are the exceptions to that?

A. There are other taxes, other than ad valorem taxes.

Q. All right, and what did you do in respect of those-taxes? I believe you testified this morning in connection

with a capital stock tax?

A. Capital stock tax and federal tax on checks. That was on the basis of the general expense percentage distribution. I believe all of the other taxes, as a matter of fact, were direct but I will check that right now. Auto taxes were prorated on the basis of the investment applicable to Texas, less the five and one-half per cent determined to be non-public service property.

[fol. 2700] Q. And was that the book cost of the automo-

biles?

A. That is correct. I believe I can safely say now, although I will confirm it, that the Gainesville district and the Vernon district probably represent the only values furnished us by Mr. Freese, to enable us to make our determinations. I will check that. Franchise tax, foreign corporation, permit fee and so forth, on a direct basis, less the percentage applicable to non-public service property, as determined by your accounting department.

Q. And in which you concur, in so far as the final applicable per cent was concerned?

A. That is correct.

Q. Now does that explain the total segregated amount, covering the Texas operations, in the amount of \$754,-282.79, and which covers the item of taxes other than gross production and federal income?

A. You have given the total, I believe, for general ex-

penses, Mr. Griffith, instead of for taxes.

Q. I have done so.

A. It does cover the total shown for taxes in the amount of \$295,218.11.

Q. Which is the segregated amount covering the Texas property?

A. That is correct.

Q. And that is to be compared with the item of \$355, 463.27 covering the over-all figure shown on page 1 of your Exhibit 5?

A. \$355,463.27, that is correct.

[fol. 2701] Q. Now, let's go back to the general expense, for which you have segregated for the year of 1933, an amount of \$754,282.79 to Texas operations?

A. Yes.

Q. I want you to give us a detailed breakdown of that

segregation.

A. I will be very glad to do so. With the exception of donations and regulatory commission expense, we adopted a uniform percentage for all other items included as general expenses. The donations were all charged to the Texas operations.

Q. Well, they were all made in Texas, weren't they?

A. I considered that to be true; I could not be positive. If a donation was made to the American Red Cross, it may have been made to the Dallas unit or may have gone some other place, but I considered it Texas. It was made in Dallas.

Q. Well, that didn't amount to a great deal, anyway?

A. Not a great deal. The regulatory commission expense was allocated on the basis of direct—Texas being charged, for the year 1933, with \$65,812.69, while Oklahoma was charged with only \$979.70.

Q. Now, what was the total of the donations which were

chargeable to Texas operations.

A. \$10,671.70.

Q. Now, other than the item of donations, and your segregation of regulatory commission expense, how did you make the segregation of the general expense applicable to Texas?

A. First by applying direct expenses and by allocating [fol. 2702] common items in respect to compressor station expenses, transmission system property expense, producing expense, gathering system expense and so forth. We first determined the expenses for those operations and then applied the percentage found for Texas to the whole of such operations, and that is the basis we used for the general expenses. Actually, the percentage for Texas for 1933 was 85.74 per cent, or rather, it was 85.38, if I may correct that. That percentage of general expense exclusive of the two excepted items, is the percentage we applied to Texas.

Q. Well, if we refer to the last page in your Exhibit 4, do we find that you make allocations of quite a quantity of property on the basis of 15 per cent to Oklahoma and

85 per cent to Texas?

A. That is correct.

Q. So your percentage happens to be about the same as the property?

A. That is correct.

Q. But your percentage determination was built up from percentage determinations covering gathering expense, compressing station expense and transmission system expense?

A. That is correct.

Q. So if you made an error in any of your computations regarding the gathering system expense, compressing station expense or transmission system expense, why this would be superimposing one error upon another?

A. Well-yes, but I don't think we made an error; how-

ever, we could make one.

[fol. 2703] Q. Now, in connection with the auto and truck expense, under-distributed, how did you make the determination of the amount to be segregated for Texas operations?

A. We used the percentage figure found for general expense.

Q. In other words, approximately 85 per cent for Texas?

A Yes.

Q. And approximately 15 per cent for Oklahoma?

A. That is correct.

Q. Is that true, after deducting five and one-half per cent of the amount, as covering non-public service operations?

A. Yes, that had only to do with the amount allocable

to the public service operations.

Q. On the bad debts and adjustments, did you determine the geographical location of those bad debts, and apply them accordingly, or was it done on some percentage basis?

A. Well, in the sense that you asked the question, it was done geographically. You know, some of those debtors

may be elsewhere at this time.

Q. Well, in other words, if a bad debt were incurred in Texas, it was charged to the Texas operations?

A. If it was incurred in connection with what we determined to be Texas operations, it was charged to Texas.

Q. And conversely, if it was incurred at Purcell, Oklahoma, it was charged to Oklahoma?

A: That is correct.

Q. Now, take the next item of miscellaneous non-operat-[fol. 2704] ing expense in the amount of \$192.72. I believe that was the total for the miscellaneous non-operating expense over-all, as shown by Exhibit 5?

A. That is correct.

Q. And you determined all of that to be applicable to the State of Texas?

A. Yes; \$163.82 of that represented stolen meters from property within Texas.

Q. You have now explained your segregation of expenses

down to the producing expenses?

A. I think that is correct.

- Q. Now, how did you make the determination that, of the total of \$41,408.80 of producing expenses over-all for the year 1933, \$31,183.91 should be allocated to Texas operations?
  - A. Those expenses are carried on the books, segregated.
- Q. In other words, it was not necessary to make an allocation in that respect?

A. No sir, it was not.

Q. So this particular figure is taken, then, directly from the books?

A. That is correct.

Q. And those expenses are kept by fields, are they not?

A. They are—I am positive of that.

Q. And you took the geographical location of the fields, and applied the expense shown by the books for the fields?

A. Yes, which was the same basis that they were entered on the books.

[fol. 2705] Q. Now, on the item of gross production taxes, did you take as applicable to Texas operations, only the gross production taxes payable in the State of Texas?

A. That is correct.

Q. In connection with the drilling tools expense, underdistributed, how did you make a segregation of that expense, as applicable to Texas?

A. We used the determined general expense percentage.

- Q. Was that in the round figure of 85 per cent of the total?
  - A. That is correct.
- Q. Now, in connection with the dry hole expense, determined by you on page 1 of Exhibit 5 to be over-all \$18,704.52, it would appear that you have allocated \$17,912.98 to Texas?
  - A. That is correct.
- Q. To Texas operations. Now, how was that allocation made?
- A. That is direct, based upon the location of the dry hole.
- Q. And the place where the expense actually was incurred?
  - A. That is correct.
- Q. Now, the cancelled and surrendered leases; were they also determined by geographical location of the lease? That is, whether they were leases which were on lands in Oklahoma or Texas, as the case may be?
  - A. That is correct.
- Q. And upon that basis you made the segregation applicable to the Texas properties?
  - A. That is correct.
- [fol. 2706] Q. In connection with the management fees, I believe you stated that there was a small adjustment which should be made?
- A. Yes. We charged too much of the management fee to the Texas operations.
- Q. And that would be offset to a certain extent by the fact that, according to your testimony, the non-operating revenues for the year 1933 are shown to be slightly in excess of what they should be as allocated to Texas?
  - A. That is correct.

Q. Did you in the preparation of your Exhibit 4, make a determination of what compressors at the Petrolia compressor station were used solely for the compression of Texas gas?

A. No, I did not.

Q. Did you know how many compressors are located at the Petrolia compressor station?

A. I do not.

Q. Do you know how many of those compressors are segregated solely for the compression of gas produced in the State of Texas?

A. No, I do not.

[fol. 2707] Q. Do you know what proportion of the gas transported from the State of Oklahoma to the Gainesville Compressor Station is compressed by the compressors located at the Gainesville Compressor Station?

A. No; I do not.

Q. Did you make any attempt to determine the relative amounts of Texas and Oklahoma gas which are hand-ed by that Compressor Station?

A. I did not.

Q. Then, how did you say you made your allocation of

expenses of those compressor stations?

A. I will have to go back to it, I have so many calculations in here; I am not going to trust my memory. On the compressor stations in the Gainesville District, we did make that allocation on the basis of physical location of the property as furnished to us by Mr. Freese.

Q. In other words, the fact that these compressors were located in the State of Texas caused you to apply those

compressors to Texas operations?

A. That is correct.

Q. And it did not make any difference whether they were handling Texas gas or Oklahoma gas?

A. No; particularly under our method of allocating gas

sales.

Q. Do you know what proportion of the compressor station at the Petrolia Station, at Petrolia, Texas; is used for the handling of gas produced in the Shamrock Field and [fol. 2708] transported through Line A to Petrolia, Texas?

A. 1 do not.

Q. Do you know what proportion of the Compressor Station at Petrolia, Texas, is devoted to the compression of gas produced and/or purchased in the state of Oklahoma

ad transported to Petrolia for compression through Lines and 2nd H?

A. I do not.

Q. Under your method of allocation, it would not be cessary to know that?

A. That is correct.

Q. And you made no attempt to determine it?

A. No.

Q. You similarly made no attempt to determine the use which the Gainesville Station was put, as far as the comession of Texas or Oklahoma gas was concerned?

A. That is correct.

- Q. Now, how did you account for the gas which was ansported through the transmission system known as Line and up to Caddo, Hugo, and Durant, Oklahoma?
- A. We made no accounting of gas by lines. I have tried make it clear that we started with the gas produced in the spective states and then determined what was sold within a respective states, and we did not make any determinately of 2709] tion in respect to the lines that carried the gas.
- Q. Now, of course, so far as these towns on Line A are neerned—that is Frederick, Tipton, Manitou, and Mounin Park, which are supplied by Line A, do you know nether they have ever at any time received any Oklahoma s—that is, gas purchased and/or produced in the state Oklahoma?
- A. I don't know that they did; but we did give Oklahoma edit for sales in those towns.
- Q. Now, as far as the sales of gas by the Company at ago, Caddo, and Achille, Oklahoma, are concerned, did u give any consideration in your segregation as to aether that gas was actually produced in the State of exas, or whether it was produced in the state of Oklama?

A. Not by towns.

- Q. Did you just assume that that gas was produced in estate of Oklahoma?
- A. No; we made no assumptions. We made actual deternations of production of gas; but we made no allocations to towns as to source of supply.
- Q. It was not necessary for you to know in connection th your segregation whether the gas sold in Oklahoma is produced in Oklahoma or elsewhere?

A. That is correct.

Q. For your purposes you were content with the deter-[fol. 2710] mination of whether there was any net amount of gas left which could be transported out of Oklahoma into Texas after supplying the demands of the Oklahoma customers?

A. That is correct.

[fol. 2711] Q. Mr. Phillips, on yesterday afternoon you said that you would refer to the notes which you had in your room, and then tell us the basis of your breakdown in connection with the Vernon and Gainesville districts.

A. Yes, Mr. Griffith. In respect to the Gainesville district we have the property values as furnished to us by Mr. Freese and the percentages determined therefrom. Do you

want the-

Q. What were the property values that were furnished to you by Mr. Freese, and the percentages determined therefrom?

A. For the Gainesville district—total property value,

\$2,961,773.60; applicable to Texas, \$2,373,771.20.

[fol. 2712] Q. Now, what did you understand by the term "applicable to Texas"—that that referred to the property which was geographically located in the State of Texas and in the Gainesville district?

A. That is correct, applicable to Oklahoma, \$588,002.40, the percentages being: to Texas, 80.15; to Oklahoma, 19.85. For the Vernon district the total property value furnished us by Mr. Freese was \$2,465,200.69; applicable to Texas, \$2,191,450.61; to Oklahoma, \$273,750.08—the percentages being: to Texas, 88.90; to Oklahoma, 11.10.

Q. Then, again, those percentages are determined by the geographical location of the property in Texas and in Ok-

lahoma, respectively?

A. That is right.

Q. Will you refer, please, to page 9-A of Plaintiffs' Ex-[fol. 2713] hibit 4. How did you determine that compression and transmission expense on net gas sold in Texas, neglecting line loss?

- A. We made a determination of the unit price per thousand cubic feet of over-all compression and transmission expenses within the State of Texas, and we applied the percentage determined to the gas that we credited to Oklahoma.
- Q. Well, now, in the last analysis, your over-all compression and transmission expense was an allocation or segregation, was it not?

A. In some respects it was, as testified to.

- Q. Well, then, if that was an allocation or a segregation, how did you arrive at the figures which you use on 9-A of Exhibit 4?
- A. Well, we made a determination on the basis of allocation to find these expenses for transmission and compres[fol. 2714] sion station operation, and we simply took that unit or that total sum determined, and then applied the total of expenses to the gas transported, to find the unit for transportation expense.
- Q. And you finally determined that the net compression and transmission expense on the net Oklahoma gas sold in Texas was \$3,305.16?
  - A. That is right.
- Q. Now, do you know where Line H and Line Second H are located?
  - A. I wouldn't say that I do.
  - Q. Do you know where Line G is located?
  - A. No, I wouldn't say that I know where it is located.
- Q. Do you know how many miles of mainline pipe there are between Gainesville and Red River on Line G?
  - A. No, I don't know.
- Q. You don't know how many miles there are between the Petrolia Compressor Station and Red River on Line H and Second H?
  - A. I do not.
- Q. You made no attempt to allocate that expense in connection with miles of pipe that were used for the transportation of this Oklahoma gas into Texas?
  - A. I did not.
- Q. Refer, please, again to page 9-A of your Exhibit 4. [fol. 2715] A. Yes, Mr. Griffith.

Q. Do you know that the net gas sold in Texas, neglecting line loss and referring to Oklahoma gas, was 132,381,000 feet?

A. One hundred and thirty-two million, three hundred

and eighty-one thousand cubic feet.

Q. Isn't it the same thing?

A. Yes.

Q. Now, in order to arrive at that figure, you had deducted from the Oklahoma gas produced and/or purchased, 171,168,000 cubic feet, covering Oklahoma sales off of Line A, did you not?

A. Is that shown in this exhibit?

Q. No, it isn't, but I am asking you if you didn't do that?

A. I explained yesterday, Mr. Griffith, how we determined this sum. Now, I don't have in mind the figures you have asked me about, but I will be very glad, if you want me to, to again testify as to our determination of our figure.

Q. No. I merely want to show-

A. Well, I don't have those figures in mind.

Q. Well, do you have your working papers with you to

which to make reference?

A. I wouldn't know where to look for that figure at all. [fol. 2716] Q. I see. So you don't know whether the figure of 171,168,000 cubic feet would represent the sales in Oklahoma off of Line A of gas produced in the Panhandle territory?

A. No, I don't know.

Mr. Fitzhugh: You are talking now about 1933?

Mr. Griffith: Referring to the year 1933.

Q. Well, if as a matter of fact, there were sales off of Line A in Oklahoma of gas produced in the Shamrock territory of 171,168,000 cubic feet for 1933, and you had treated that gas as Texas-produced gas, then it would have been added to your figure of 132,381,000 on page 9-A of your exhibit, would it not?

A. Well, I don't follow that question, Mr. Griffith, at

all.

Q. Well, look at this map, Mr. Phillips—that is Defendant's Exhibit 29. You know where the gas comes from that in the ordinary course of business is sold to Davidson, Frederick, Tipton, Manitou, Snyder, Mountain Park, and Hollis, Oklahoma?

- A. Yes, it comes off the line that we have been discussing.
- Q. Which comes off of Line A, does it not?
- A. Yes.
- Q. And the gas ordinarily sold at the city gates of those [fol. 2717] towns is gas which is produced in Wheeler County, Texas?
  - A. That is right.
- Q. But, notwithstanding that fact, in making your determination of the net amount of Oklahoma gas produced and/or purchased and transported into Texas, you took out the amount of gas-whatever it amounted to in volumecovering sales for Hollis, Davidson, Tipton, Frederick, Manitou, Snyder, and Mountain Park, did you not?

. A. No, sir, I didn't. I considered all gas sold at those

within Oklahoma as Oklahoma sales.

- Q. Well, let's get at it in another way. Take the year 1933—what was the amount of gas, in volume, produced and/or purchased by the Company in the State of Oklahoma in 1933?
  - A. Produced or purchased?
  - Q. Both.
- A. In 1933—gas purchased, 1,076,562 cubic feet; produced, including royalty purchased, 613,780,000 cubic feet.

Q. Giving what grand total amount?

A. There is an adjustment, for the net storage, of 422,-567,000 cubic feet, giving a net total of 1,267,775 cubic feet.

Q. Now, can you give me the sales off of Line H or

[fol. 2718] Second H?

- A. Mr. Griffith, as I testified yesterday, we did not account for sales by line; we simply took the total produced or purchased gas in the State of Oklahoma and took the total sales within the State of Oklahoma.
- Q. And that was regardless of the source or origin of the gas supply?
  - A. Yes, sir.
- Q. Now, take the year 1933 as reflected by your summary on page 1 of Plaintiffs' Exhibit 4.

A. Yes, Mr. Griffith.

Q. You show in your comparative statement of earnings. that for the year 1933 there was available for net earnings before providing for depreciation, depletion and Federal Income Taxes, \$4,185,327.48.

A. That is right.

Q. Now, Mr. Phillips, you testified on yesterday that that is based upon what you deem to be a proper segregation of the revenues and expenses applicable to Texas.

A. That is right.

Q. And, of course, it is based upon the actual revenues [fol. 2719] collected by the Company, in so far as the 40-cent city gate rate for domestic gas is concerned?

A. That is right.

Q. Now, how much in thousands of feet or millions of feet or billions of feet was the volume of domestic gas sold which is included in your gas sales figure for 1933 of \$7,387,118.427

A. You want to know the volume of gas that is included?

Q. Domestic gas.

A. For 1933?

Q. Yes, sir, which you allocate to Texas operations.

A. We show for the year 1933, 13,380,727 cubic feet of domestic gas allocated to Texas sales, for the year 1933. [fol. 2720] Q. Now, the Railroad Commission of Texas in its opinion and order which is in evidence here attempted to reduce that 40-cent rate to 32 cents per thousand cubic feet, did it not?

A. It did.

Q. The difference between the 32 cents and the 40 cents is 8 cents?

A. That is right.

Q. Will you apply that eight cents to the volume of domestic gas that you have segregated in connection with the Texas operations for the year 1933?

A. You want me to make that calculation?

- Q. If you please. Do you have some paper there on which to make it?
- A. I do have, yes. (Witness figures.) I compute it to be \$1,477,423.68.
- Q. Now, would that be a deduction from the net earnings which you show for the year, before providing for depreciation, depletion and Federal income tax?

A. Yes; if a rate of 32 cents had been applied instead of 40 cents collected, the revenues would have been decreased

by that sum.

Q. Will you therefore make the deduction of the amount you have just computed from the figure of \$4,185,327.48 ap-

pearing under the column "12-31-1933" on page 1 of your Exhibit No. 4?

[fol. 2721] A. Making the deduction we have a figure of \$2,707,903.80.

- Q. Now, will you refer to the last shee- in your exhibit, page 11?
  - A. I have it.
- Q. You determined there that there should be segregated in connection with the Texas properties and operations \$44,053.612.30?
  - A. That is correct.
- Q. Will you please give me the per cent relation of the figure of \$2,707,000.00, which you have just determined to your property segregated in connection with Texas operations?
- A. You want the percentage that last sum I read into the record is to that figure for property?
- Q. That is correct. Just a round percentage will be satisfactory.
- A. I don't know that I would like to give a round per cent. It would be something less than six per cent, I believe.
- Q. It is so much less that I would like for you to further refine your answer.
- A. I think I am in error. I don't believe it is less. The property value that we have used is substantially forty-four million dollars. Well, six per cent of forty-four million dollars would be \$2,660,000, and the figure we found is \$2,707,000.
- Q. You are correct, and approximately within what percentage?
  - A. Slightly in excess of six per cent.
- [fol. 2722] Q. And if we deduct two per cent for depreciation as allowed by the Railroad Commission in its opinion and order, it would be somewhat less than four per cent for net return, would it not?
  - A. Using a two per cent?
  - Q. Yes.
  - A. Slightly more than four per cent.
- Q. And that would be without making provision for Federal income taxes?
  - A. That is right,
  - Q. In other words, your figure of slightly in excess of six

per cent is before making provision for Federal income taxes, depreciation, depletion,—

A. That is right.

Q. —and amortization?

A. That is right.

Q. Now, on yesterday, Mr. Phillips, I understood you to say that you made allocations in connection with the compressor station expenses. How are these compressor station expenses carried on the books of the Company.

A. You are asking whether or not they were segregated as between Texas and Oklahoma on the Company's books.

Q. No; how do they appear on the Company's books? Do

they appear as a common expense?

A. I will have to refer to the sheets. I testified yesterday as to just how they do appear. Some of these expenses [fol. 2723] carried on the books under the designation of Compressor Station Expenses are carried separately as between Texas and Oklahoma. Some of the expenses are carried as common expenses. As a matter of fact, \$346,306.81—that is for 1934; let me give you 1933.

Q. We have been using 1933 all along, and I would like to

have the 1933.

A. For 1933, the total expenses designated Compressor Station Expenses on the books of the Company is \$338,433.01. All but \$16,368.38 are carried separately on the books of the Company as between Texas and Oklahoma.

Q. In other words, they were direct expenses, were they

not?

A. That is correct.

Q. That is, out of this total of \$338,433.01, \$322,064.63 were direct expenses?

A. That is correct.

Q. And there only remains the \$16,368.38 to prorate?

A. That is correct.

Q. Now, do I understand that you took the Compressor Station Expense, in so far as it was a direct expense and applied it to Texas or Oklahoma, as the case might be?

A. I did.

Q. How did you prorate the \$16,368.38, which was common

expense?

A. As testified to yesterday, this expense was prorated on the basis of Direct—that we took the percentage shown [fol. 2724] on your books as being Direct Compressor Station Expense for Texas. We took the percentage of that to the total Compressor Station Expense Direct, and found our percentage and applied it to the common expense, with the exception of Repairs to Buildings, which was prorated on the basis of book cost of such buildings.

Q. Will you refer to page 9-a of Plaintiff's Exhibit 4

again?

A. Yes, sir.

Q. You have previously testified, as I understand it, Mr. Phillips, that for the net amount of Oklahoma gas produced and/or purchased and transported into Oklahoma, you gave it credit at the rate of 24.87 cents per thousand cubic feet?

A. That is correct.

Q. That figure appears on page 9-a of your Exhibit 47

A. It does.

Q. Now, that is the average as determined by you of all gas sales in the State of Texas?

A. Yes; that is right.

Q. What are the three largest industrial customers of the Company?

A. I am not prepared to answer that.

- Q. You don't have that any place in your working papers?
- A. No, sir; I did not feel that it was necessary to my calculations.
- Q. Did you ever hear about the West Texas Utilities Company Power Plant that receives gas from the Company near Quanah, Texas?

[fol. 2725] A. I have heard about it.

- Q. Do you recall that it is one of the large industrial customers of the Company?
- A. I don't recall that, because I never made any examination with reference to gas to individual consumers.
- Q. You have no knowledge of the large industrial customers?

A. I do not.

Q. I will endeavor to refresh your memory, and I think I can. Do you recall that there is a large industrial customer coming off Line A in the state of Texas near Quanah?

A. I wouldn't say that I do.

- Q. You wouldn't say that you do. You have no knowledge of it?
- A. Not of industrial consumers. We did not concern ourselves with that calculation.

Q. If there is a large industrial customer at Quanah, in the ordinary course of business, would it be your understanding that that customer would be supplied with gas which would be produced and/or purchased in the Wheeler County Field?

A. That would be my assumption.

Q. Did you ever hear of the Oil Belt Power Company plant, or the Texas Public Utilities Company plant, near Eastland, Texas?

[fol. 2726] A. Yes.

Q. You know that is one of the large industrial customers of the Company?

A. I am willing to assume that, although I have no knowl-

edge of how much they consume.

Q. Do you recall the net capital additions in connection with the acquisition of the so-called T. P. U. property?

A. I do.

Q. Do you not now recall, as a consequence, that the Company procured a large industrial contract in that area?

A. I understand they did get a contract.

Q. Did you ever hear of the Atlas Portland Cement Company at Waco?

A. Yes.

Q. Is that a large industrial customer of the Company?

A. I would think it is.

Q. In the ordinary course of business, would it be your understanding that any of the gas purchased and/or produced in the State of Oklahoma would reach these three plants I have mentioned—that is the West Texas Public Utilities Plant near Quanah, the Oil Belt Power Company Plant or the Texas Public Utilities Plant near Eastland, Texas, or the Atlas Portland Cement Company plant near Waco?

[fol. 2727] A. In my opinion, those plants would not use Oklahoma gas.

Q. Of course, the sales of gas to those plants entered into your determination of the average selling price of gas in Texas?

A. That is true.

Q. Now, what was the total volume of gas which you determined was sold within the State of Texas as reflected by your exhibits?

A. Both domestic and industrial?

Q. Yes.

A. For the year 1933, 29,703,000 thousand cubic feet.

- Q. How much of that was industrial and how much domestic?
  - A. Domestic, 13,380,727 thousand cubic feet. •
  - Q. Where is that shown in your Exhibit 4?
  - A. On page 1-a. Do you want the industrial?

Q. If you please?

A. 16,322,273 thousand cubic feet.

Q. Do you have the average selling price of industrial gas there?

A. \$.1243.

[fol. 2728] Q. Now, do you know what the average selling price was for the gas sold to those several large industrial customers of the company in Texas receiving gas purchased and/or produced in Oklahoma?

A. I do not.

Q. Do you know how that would affect your selling price as determined for the credit on net Oklahoma gas trans-

ported into Texas?

A. Of course, it would affect the selling price, Mr. Griffith, but in making those applications to Oklahoma on a sales basis there were a lot of factors that entered into our conclusions, so we thought we had been more than fair with the Oklahoma operations in view of all these other elements that entered into the picture by allowing to Oklahoma the average selling price.

Q. Well, if as a matter of fact you had eliminated the sales of gas to those three large industrial plants which I have mentioned, do you know that the average selling price in Texas would have been 27.6 cents instead of 24.87 cents as

determined by you?

A. No, I don't know that. I could not know that without I had that data before me.

- Q. Would you be surprised to know that that is a fact?
- A. No, sir; I would not be surprised.

Q. You are unable to confirm or deny it?

- A. I am unable to confirm or deny it. Of course, I could [fol. 2729] determine it by an inspection of the records.
  - Q. But you don't have the data here in Austin to do that?
  - A. I have not.
- Q. You could not confer with any of your associates and give me that information?

A. I am quite confident I could not, because we undertook

our determinations along a different line.

Q. If the average selling price of gas in Texas for the year 1933, exclusive of the three large industrial customers that I have mentioned, were actually 27.6 cents per thousand cubic feet, that would be a figure which would be approximately eleven per cent in excess of the average selling price of 24.87 cents as adopted by you as shown on page 9-A of Plaintiff's Exhibit 4?

A. That is correct, but had we found the average selling price much higher than we did find we would have felt that the amount to Oklahoma would have been so disproportionately large that we would have had to make other calculations.

Q. In other words, that would have thrown your calculations clear out of gear?

A. Yes; we would have known we were giving Oklahoma

entirely too much.

Q. Well, now, let's see what Oklahoma is given on your segregation. What do you show as the total of the company property December 31, 1933?

A. The total property account?

[fol. 2730] Q. Yes. Look at page 22 of your Exhibit 5.

A. You mean Exhibit 5?

Q. Yes, Exhibit 5.

A. Page 22 of Exhibit 5, Gas Sales?

Q. Page 22.

A. Page 22?

Q. Yes, sir.

A. We show the total property, book cost—adjusted book cost, \$50,283,644.65.

Q. Now, if you will look at page 11 of Exhibit 4.

A. All right.

Q. What do you show to be segregated out of that book cost in connection with the Texas properties?

A. \$44,053,612.30.

Q. Would that give a balance applicable to the Oklahoma property and operations?

A. It would.

Q. In what amount?

A. \$6,230,632.35.

Q. Now, the Railroad Commission of Texas in its opinion and order determined that approximately two per cent was

sufficient for depreciation and depletion and that six per cent was proper for return, did they not?

A. I believe they did.

Q. Now, if we take a combination of the two, eight per cent, on the Oklahoma property that is segregated, do we get a figure in the amount of \$498,402.59?

[fol. 2731] A. That is correct.

- Q. Now, what were the operating expenses in connection with the Oklahoma operations as determined by your exhibit?
- A. I will have to refer to my working papers. I am confident these figures are right, but if I am going to testify to them I had better refer to my work sheets. I have the utmost faith in the figures. I am going to have to make some calculations.
- Q. In order to save your time, Mr. Phillips, I will ask you if I have shown you a sheet which tabulates those calculations?

A. You have. The total expenses are \$395,777.22.

Q. Then, in connection with your Exhibit 4, you make an adjustment of gas sales for the Oklahoma gas sold in Texas in the amount of \$29,617.92?

A. That is right.

Q. So the net operating expenses would be \$366,159.30, would they not?

A. That is right.

Q. And that, added to your pre-determined amount of \$498,402.59, would give a total requirement for the Oklahoma operating expenses, depreciation and return in the amount of \$864.561.89?

A. That is right, figuring the return at six per cent and depreciation at two.

[fol. 2732] Q. Well, I said "pre-determined". I mean in the manner concerning which you have testified.

A. Yes, that is right, but I wanted to be positive about my answer.

Q. Now, what were the sales of industrial gas in Oklahoma for the year 1933?

A. I don't know. I believe I have that figure, too, though we made no exhibit setting forth the Oklahoma operations on the whole. I may have that figure here.

Q. I believed you testified to it on yesterday.

A. You want me to testify concerning the domestic or the industrial sales?

Q. Industrial sales.

A. 571,288,000 cubic feet.

Q. Giving what amount of money?—was it not \$76,-915.92?

A. Well, I would have to figure on this.

Q. Didn't you testify to that figure yesterday, Mr. Phillips?

A. I am confident that I did, and I will refer to this control sheet and give it to you again. What was the figure?

Q. \$76,915.92.

A. I don't believe I testified to that figure, Mr. Griffith, because that would be a breakdown of Oklahoma sales, and I don't remember having testified to it in the record.

Q. Well, you could make the calculation, could you not, since you have previously testified as to the volume of Oklahoma sales?

[fol. 2733] A. Well, I can give you the over-all Oklahoma sales, both industrial and domestic.

Q. Now, didn't you testify as to the breakdown between

the two yesterday?

A. I don't remember, Mr. Griffith. I would be glad to be cited to my testimony.

Q. Well, frankly, I am unable to identify it by the page of

the record transcript.

A. Well, I am confident I did not testify in respect to sales of industrial gas in dollars and cents.

- Q. Well, on the basis of five hundred million, approximately of industrial sales in Oklahoma, \$76,915.92, representing the money value of the industrial sales, would not seem out of line, would it?
  - A. It would not seem out of line, no.

Q. It would seem approximately correct, in any event?

- A. Well, I would have to know the breakdown in industrial sales, with the price paid by industrial consumers, in order to get the exact calculation.
- Q. Now, yesterday, in explaining compression and transmission expense, I believe you said that \$3,022.52 of the total was allocated to Oklahoma?

A. I believe I did give some figure near that, at any rate.

Q. Now, if we add that figure of \$3,022.52 to the amount which you said is approximately correct, \$76,915.92, we get a total of \$79,938.44?

A. That seems right.

[fol. 2734] Q. And if we deduct that from the total requirements for depreciation, depletion, operating expenses and return we have to get an amount, which must be secured from domestic sales, of \$784,623.47?

A. That is correct.

- Q. Now, what were the domestic sales of the company in Oklahoma in 1933?
  - A. In dollars and cents or volume?

Q. In volume.

A. 564,106,000 cubic feet.

Q. We have, therefore, to get for return, depreciation, depletion and operating expenses on the Oklahoma property a figure of \$784,623.47, and we have a volume of sales of 564,106,000 cubic feet. To get that revenue, what will be the domestic gate rate in Oklahoma per thousand feet—cubic feet of gas delivered at the city gates of all the Oklahoma towns and cities?

[fol. 2735] A. That is substantially correct; without doubt it is as near to the even cents as could be determined.

Q. What is substantially correct? What is the necessary domestic gate rate for the Lone Star Gas Company to receive, based upon your segregation in connection with its city gate sales in the State of Oklahoma?

A. And based upon the assumption of the six per cent return and two per cent depreciation rate, as calculated in

the figures you have figured here, it would be \$1.39.

Q. \$1.39 per thousand cubic feet for gas delivered at the city gates of all Oklahoma towns and cities?

A. That's right.

Q. That is as contrasted with the forty cent price actually received?

A. That is right.

Q. Now, will you agree in principle, Mr. Phillips, that from some source or other the company is entitled to earn a fair rate of return upon all of its property?

A. Yes, I agree with that principle.

Q. There may be some doubt as to where it ought to come from but you think it is fair that the company should carn a fair rate of return upon all of its property?

A. Yes, I think any investor is entitled to that.

Q. Now, what do you show as the net amount expressed in volume of the Oklahoma gas produced and/or purchased, which is transported into Texas and sold in Texas? If you refer to page 9-a of Exhibit 4, I think you have it. [fol. 2736] A. Yes, I have it. I show the net gas produced or purchased in Oklahoma, sold in Texas, neglecting line loss, for the calendar year 1933, to be 132,381,000 cubic feet.

Q. In other words, 132,381,000 cubic feet?

A. That is correct; my answer was 132,381 thousand cubic feet.

Q. Now, let's assume that the regulatory authorities in the State of Oklahoma would not permit the Lone Star Gas Company to charge \$1.39 per thousand cubic feet for city gate sales to cities and towns in the State of Oklahoma; if that were true then the company must have some other recourse if it is going to earn a rate of return upon that Oklahoma property?

A. That is true, but I assume you have the same remedy

in Oklahoma that you have in Texas.

Q. Now, you previously made a computation to show that in order for the company to obtain two per cent for depreciation and six per cent for return upon the Oklahoma property, as segregated by you, it would be necessary to have \$498,402.59. Is that correct?

A. I believe that is the correct figure.

Q. Now, you have shown the net earnings for the entire system of the company for the year 1933; that is, the net earnings before providing for depreciation, depletion and federal income tax, to be \$4,123,796.36?

A. For 1933? Yes, I show the total for all operations to

be \$4,123,796.36.

[fol. 2737] Q. You show the net earnings for the Texas property, on page 1 of your Exhibit 4, to be \$4,185,327.48?

A. That's right.

Q. Therefore, the deficit from Oklahoma operations, in the manner that you have made your segregation, is \$61.531.12?

A. \$61,531.12.

Q. So if we are going to earn an over-all return on the Oklahoma property, after providing for depreciation and depletion, we will have to add the amount of \$61,531.12 to

the \$498,402.59, which is eight per cent upon the Oklahoma . property, as segregated by you?

A. That is right.

Q. That would give you a total of \$559,933.71?

A. That is right.

Q. The total amount that would be necessary to be earned upon the Oklahoma properties?

A. The total to be earned if you would have a six per cent return and two per cent depreciation.

Q. And that would be before providing for federal income taxes?

A. It would.

Q. Now, the net gas delivered from Oklahoma into Texas, as shown on page 9-A of your Exhibit 4, is 132,381,000 cubic feet, as you previously testified?

A. That is correct.

Q. Will you divide \$559,933.71, which is the amount necessary to be earned to provide for two per cent for depreciation and six per cent for return upon your segregation of [fol. 2738] the Oklahoma properties, by the net volume of gas delivered from Oklahoma into Texas?

A. If you have many of these requests, Mr. Griffith, I will appreciate it if you will give them to me and let me work them out in the noon hour.

Q. This is the last request I have.

- A. Now, you want me to divide this 132,381,000 cubic feet into what?
- Q. Into the amount necessary to be earned upon your segregation of the Oklahoma properties, to give two per cent for depreciation and six per cent for return, in the amount of \$559,933.71.

[fol. 2739] A. Well, I am going to assume this figure you have here is approximately correct.

Q. It is approximately correct, isn't it? That if the Lone Star Gas Company was to have two per cent for depreciation and depletion and six per cent for return upon the Oklahoma property as segregated by you, and if that earning was to be obtained through the net deliveries of gas from Oklahoma into the State of Texas, that gas would have to be sold at a price at the city gate in Texas of \$4.23 per one thousand cubic feet?

A. That is under the assumption that you are going to sell your produced and purchased gas in Oklahoma at the prevailing city gate rates, and the rest that you send down into Texas, you would expect to get all of your return, depreciation and operating expenses out of. That is true on that assumption.

Q. And if we reverse the assumption, and expect to get it out of Oklahoma, we will have to get \$1.39 at the city

gate in Oklahoma?

A. That is right.

Redirect examination.

# Questions by Mr. Fitzhugh:

Q. Now, Mr. Phillips, Mr. Griffith has called to your at-[fol. 2740] tention Line A, the line that comes from Wheeler County, the Shamrock field, through a corner of Oklahoma, and down to the Petrolia plant?

A. Yes.

Q. Hollis, Oklahoma, takes gas off of that line, does it not?

A. It does.

Q. Now, in figuring your allocation as between the Oklahoma and the Texas properties, you have credited at Hollis the Oklahoma sales with the full price of gas obtained at Hollis, have you not?

A. I have.

Q. Now, have you credited as against Oklahoma for any charges of carrying the gas from Wheeler County to Hollis?

A. I have not.

Q. All that is charged against the Texas properties, is it not?

A. It is.

Q. In so far as the Oklahoma operations are concerned at Hollis, all the Hollis gas gets a free ride from Wheeler County, does it not?

A. It does.

Q. Now then, coming on down here to where the Line A-1 six inch leaves the A line at Oklaunion, transporting gas which originally comes from the Wheeler county field, and delivering gas to the towns of Manitou, Tipton, Snyder, Mountain Park and Frederick, Oklahoma, your allocation assumes, does it not, for credits to the Oklahoma operations,

that the gas is sold as if it were metered at Oklaunion, and [fol. 2741] there credited with the price actually gotten for that gas when sold at Oklahoma?

A. That is right; all the gas sold off that line within Oklahoma is credited at the full sales price received for it,

and is credited to Oklahoma.

Q. And all this gas, in just the same way as the gas sold at Oklahoma, so far as the credits to the Oklahoma operations are concerned, gets a free ride all the way down there?

A. It does, to the river.

'Q. You do not deduct anything on account of transportation charges from those Oklahoma credits, do you?

A, I do not.

Q. Now, coming on down here to where Lines H and Second H join Line A and Line B and Line Second B at Petrolia; Line H and Second H bring gas from Oklahoma into Texas, do they not?

A. I think so, yes.

Q. You were asked yesterday if you knew which of the compressor units at the Petrolia compressor station were used to compress Texas gas, and which were used to compress Oklahoma gas?

A. I was.

Q. And I believe you answered that you didn't know?

A. That's right.

Q. Now, using the method you have used, Mr. Phillips, did it make a bit of difference?

A. Not a bit, because we charged all the expenses to Texas, except for that small proration.

[fol. 2742] Q. And all the expenses for sending this gas through the line were charged to Texas?

A. That is right.

Q. And not one penny of the compression costs were taken away from the Texas operations, were they?

A. Not except for the allocation of the small amount for

charges coming on down to these other points.

Q. All right, sir. Now then, coming over here to Line G, which brings gas from Oklahoma into the State of Texas, and to the compressor station at Gainesville, the same sort of a condition obtains, does it not?

A. Yes, the gas is coming into Texas from Oklahoma.

Q. And how are the costs of compression at the Gainesville compressing station charged as between the Oklahoma operations and Texas operations? A. They are first treated as entirely Texas charges, and then a proration is made for the haul from the River

to Gainesville.

Q. Now, some of this Oklahoma gas goes through Line E from Gainesville over to the E-5 six inch, where it is transported into Oklahoma, and serves the towns of Achille, Durant, Caddo and perhaps another or so. Now, all of that gas, in the same way as the gas at Hollis, and the gas sold through the A-1 six inch, gets a free ride to the point where it goes into Oklahoma does it not?

A. That's right.

Q. And all those costs are charged against the Texas [fol. 2743] operations, are they not?

A. That's right.

Q. That is, the charges of that transportation?

A. That is right.

Q. And in the same way, the gas that goes through the E-16 eight inch to supply the town of Hugo gets a free ride so far as Texas transportation is concerned?

A. It does.

Q. Now then, nowhere have you in your method of allocation, Mr. Phillips, ever charged against this gas that goes into Oklahoma, the depreciation, maintenance or any other cost connected with the transportation?

A. I have not.

Q. Now, the lines B and Second B, and Lines F and C or any of the other lines that participate in any way in the transportation of Oklahoma gas to points where it may be used in Texas—all the maintenance and depreciation and the costs of keeping up those lines and their operation are charged as against the Texas operations, are they not?

A. That's right.

Q. Now then, Mr. Griffith called your attention a few moments ago to some industrial plants, which he says are large industrial plants, using only Texas gas?

A. That is right.

[fol. 2744] Mr. Griffith: Texas produced gas. Mr. Fitzhugh: Texas produced gas.

Q. Now, he asked you to make some computations based on some figures he gave you that showed that if those industrial consumers had been excluded, a higher average price for industrial gas would have been obtained. Now, I will ask you, Mr. Phillips, if the domestic consumers served in the same area and with Texas produced gas, had also been excluded, isn't it entirely possible that the average over-all would have come out just about the same?

A. Well, it is certainly possible. I wouldn't say that it is or is not true; it would depend upon the volumes. It certainly is a possibility, depending upon the volumes of domes-

tic and industrial gas.

Q. Well, you know, do you not, Mr. Phillips, that the biggest sales—the largest industrial consumers are located around Fort Worth and Dallas?

A. No, Mr. Fitzhugh, I am not familiar with the history of the industrial consumers. I don't feel like I am in position to testify in respect to them.

Q. So without making those computations, you couldn't

tell exactly how the average would work out?

A. That is right.

Q. Now, in no case where you have accepted the figures [fol. 2745] given you by Mr. Griffith are you attempting to say that those figures are correct, are you?

A. No, I am just confirming the calculations as suggested

by Mr. Griffith.

Q. And assuming that his figures are correct, the final result would probably be right?

A. The figures given to me by Mr. Griffith, applying his

calculation method, were correct.

Q. Now, where Mr. Griffith asked you to make a figure, assuming a 32-cent price, you did not intend to say that if the 32-cent price had actually been used during the year 1932, that the revenues would have been—

A. 1933?

Q. In 1933, that the rate of return or the total net revenues would have come out as computed?

A. No, I make no assumption or statement in respect to that. I merely make the calculation of the rate applied to

the gas consumed for that period.

Q. There are a lot of things, are there not, Mr. Phillips, that could come into consideration if a 32-cent rate had actually been applied, such as increased consumption and that sort of thing?

A. Yes, it is very likely that a different rate might result

in different volumes.

Q. What was that proposition Mr. Griffith had you work [fol. 2746] out about the price of gas at the city gate in

Oklahoma? What did that finally come out, one-seventy something, wasn't it?

A. I believe it figured \$1.39.

Q. Now, for the purpose of getting that \$1.39 city gate rate, Mr. Griffith asked you to assume six per cent for return and two per cent for depreciation in Oklahoma, did he not?

A. That is right.

Q. In other words, if the rate had been set over-all for [fol. 2747] the whole System and a segregation then made as between Texas and Oklahoma, and the 32-cent rate adopted, there would be \$1.07 difference between the city gate rates in the two towns?

A. The two States.

Q. I mean the two States.

A. That is right.

Q. Now, under the Railroad Commission's order, assuming that a rate was being set over-all, who would pay that \$1.07 difference in Oklahoma?

A. Well, under the conditions assumed here, the burden

would fall on the Texas operations.

Q. In other words, by assuming the conditions of the Company in both States, and considering the proposition as a unified property, a decided advantage was given to the Company in favor of its losing Oklahoma operations, isn't that true?

A. That is right.

Q. In other words, the Company, in its Oklahoma operations, is not showing such good profit, assuming the conditions Mr. Griffith assumed?

A. That is right.

Mr. Griffith: You mean based on your segregation, Mr. Phillips?

[fol. 2748] A. Based on my segregations, and Mr. Griffith's assumptions.

Q. Yes, sir. Can you conceive, Mr. Phillips, of any other method of making a segregation as between Texas and Oklahoma that would be any fairer than the one you have made?

A. I can not. I, with the utmost sincerity, and based upon what I believe to be a sound knowledge of accounting,

I can not believe that any fairer method—and by "fairer" I mean fair to the Company—could have been adopted. I would go further than that, and say maybe a more accurate method could have been adopted, but it would have taken a long time, and it would have been less advantageous to the company.

Q. In every instance, where there was some doubt as to whether credits should be made to Texas operations or Oklahoma operations, you have decided as against the

Texas operations, have you not?

A. I certainly have.

### [fol. 2749] Examination by Mr. Fitzhugh.

Q. Mr. Phillips, referring to your pages 24 and 25 of Exhibit No. 5,—have you made a calculation to get the per cent

of the non-public service property, by years?

A. I have made a limited test, and by "limited" I mean this,—I have taken the figures shown on pages 24 and 25 of Plaintiffs' exhibit numbered 5, and shown in the first column as being public and non-public service property cumulative book cost, and from that figure, for the years 1931, 1932, and 1933, I have deducted the public service property cost computed by Mr. Hulcy, the figure for 1931; the figure for 1932 representing the Company public service property cost was submitted by Mr. Hulcy in his examination before the Railroad Commission; for the year 1933 I have used Mr. Hulcy's figure for public service property submitted in this trial. Now, I have a further calculation that shows—

Q. Wait. Now, did you get the percentages?

A. Yes, I have the dollars and cents and the percentages, too, but I hadn't read them; I want to go ahead and complete my statement in respect to what I had been able to [fol. 2750] accomplish. Now, beginning with the period that ended December 31, 1915, our pages 24 and 25 in Plaintiffs' Exhibit numbered 5, have periods identical with periods that Mr. Hulcy adopted in submitting at the hearing before the Railroad Commission of Texas a statement showing public service property for the period beginning with December 31, 1910; down through 1931. That information was submitted by Mr. Hulcy to show the public service property per the books, and if we deduct that figure, or the

figures for the respective years, from the figures shown in our exhibit—Plaintiffs' Exhibit 5, pages 24 and 25, we will then find what we can reasonable consider non-public service property. I have that data worked out in respect to amounts and percentages.

Q. Now, will you read the percentages, by years, for the

non-public service property?

The Court: Is that the percentages of the cost of the property—historical property cost, or earnings, or what? The Witness: The percentage of cost.

The Court: Per cent?

The Witness: Percentage of the non-public service property so determined, to the cost of all the property shown [fol. 2751] in our exhibit.

The Court: Book values or historical?

The Witness: Book costs.

The Court: Book costs. Go ahead.

A. For the year 1931, where I use "total"—if there be no objection, I would like to have it understood that I refer to the figure in our exhibit; it will simplify reading these figures. For the year 1931, total \$50,499,794.32; shown in Mr. Hulcy's exhibit as being public service property \$47,776,749.63, leaving for designated non-public service property \$2,723,044.69; expressed in percentage, 94.61 public service property, 5.39 non-public service property. For the year 1932, total \$52,692,574.45, amount sponsored by Mr. Hulcy as being public service property \$50,034,431.70; designated non-public service property \$2,658,142.75; expressed in percentage, to public service property, 94.96, non-public service property 5.04. For the year 1923—

Mr. Griffith: 1933, I think you mean. The Witness: 1933, thank you.

A. For the year 1933, \$50,482,002.78; sponsored by Mr. [fol. 2752] Hulcy as being public service property \$49,837,026,06, or for non-public service property so designated, \$644,996.72; expressed in percentage, public service property 98.72, non-public service property, 1.28. That has to do with the property for those three periods. Now, we have a similar comparison beginning with the period December 31, 1915, and coming on down to the point here. Shall I read that into the record?

Q. Well, about how does that average up?

A. If I may, I will first read the percentages. I think that probably gives the best picture. Beginning with the year 1915, and coming right on down-I will not repeat these dates-.01 per cent-non-public service property I refer to when I use percentage. .01; 1.44; 3.37; 3.46; 4.83; 6.57; 6.97; 7.46; 8.28; 6.87; 7.17; 7184; 15.96; 13.91; 6.05; 5.39; 5.04; 1.28. For the arithmetical average for public service over the entire period, 94.11, non-public service 5.88. I believe I can offer some explanation for the gradual increase in the non-public service percentages, which show a decided decrease from the year 1929. About that time, I believe it was, that the Company separately incorporated its gasoline plant operations, and took them out of this group [fol. 2753] of public service property. That is my understanding, that about that time that happened. Now, we have this further data for the years 1933, 1932, and 1931. We show the total earnings as reflected by our exhibits and as reflected over-all for the Company, after giving due consideration to interest and other items and putting them on a comparable basis. Thereby we have determined the sums applicable to the non-public service property and to the public service property in respect to earnings. If it should be desired that I read them into the record-

Q. Go ahead and read those earnings.

A. For the year 1933, total earnings \$4,181,183.98; the per cent 8.28 to property public service \$4,123,796.36; the percentage 8.27 to property non-public service \$57,387.62; the per cent to property 8.90. For the year 1932, total, \$5,082,916.35; per cent to property 9.65; allocable to public service \$5,010,476.49; percentage to property 10.01; allocable to non-public service property \$72,439.86; the per cent to property 2.73. For the year 1931, total \$4,966,926.90; per cent to property 9.84; public service operations \$4,909,-171.13; per cent to property 10.28; non-public service \$57,-755.77; per cent to property 2.12.

[fols. 2754-2765] Q. Do you have it for any other years

prior to 1931?

A. Mr. Griffith, I do not have. I did not have the data. You see on the earnings we had to be very careful, and we do not have in these back years a breakdown of your earnings.

Q. At the time you testified and presented a somewhat similar exhibit to the Railroad Commission of Texas, didn't the defendant strenuously object to it?

A. This defendant?

Q. This defendant.

A. Yes; I remember that it did.

Q. Wasn't Mr. Hulcy's exhibit or computations offered subsequently in rebuttal of your testimony, after a comparable exhibit to that shown on pages 24 and 25 of Exhibit 5 had been offered?

A. Mr. Griffith, I don't know. When I got through testifying, I left town. As a matter of fact, I did not know until yesterday afternoon that Mr. Hulcy had sponsored this

exhibit.

[fol. 2766] ARTHUR A. Dobson, a witness for the Plaintiffs, being by the Court first duly sworn, testified as follows:

Direct examination.

# Questions by Mr. Fitzhugh:

Q. Please state your name?

A. Arthur A. Dobson.

Q. Where do you live, Mr. Dobson?

A. Lincoln, Nebraska.

Q. What is your business or profession?

A. Engineering construction.

Q. Are you associated with any firm or partnership?

A. Yes.

Q. What is the name of your firm?

A. Well, there are several firms. There is Dobson & Robinson; Dobson & Humphreys; Dobson & Carter; V. E. Taylor & Company; Queal Construction Company.

Q. What position do you hold with those various firms?

A. Partner.

Q. Are all those concerns engaged in the construction business?

A. Yes.

Q. Does each one of those different firms have a specialty [fol. 2767] in doing construction work?

A. Dobson and Robinson are engaged purely in paving and road building, and the other firms are engaged in municipal construction in different locations.

Q. Now, Mr. Dobson, will you speak just a little louder?

A. Yes.

Q. You have to talk against these fans, and it's pretty hard to hear. Will you state in general, Mr. Dobson, what your construction experience has been, giving in as short a summary as possible, your education and what engineering work you have done and that sort of thing?

A. I am a graduate civil engineer of the University of Nebraska, and was engaged in engineering work before that time with the Government and various municipalities, and since my graduation I have been engaged in that work as a contractor, operating in territories as far North as Sutherland, Saskatchewan, south to Mobile, Alabama, and as far West as Thermopolys, Wyoming, east to Mayfield, Kentucky.

Q. Over how many years has your experience extended?

A. Twenty-four years.

Q. Twenty-four years. You have done some construction work in Texas, have you not?

A. Yes.

Q. At what places, please sir?

A. At Waco, Sweetwater, Tyler, Archer City and Dallas.

Q. What was the nature of the work done at those places?

A. Tyler was a sewage disposal plant, and the others

were sewers.

[fol. 2768] Q. In all those jobs did you have earth excavation?

A. Yes. Tyler was purely slip work.

Q. What do you mean by slip work?

A. Teams and slips, and no trench excavation.

Q. What are some of the major pieces of construction work you have done in recent years, that have involved excavation?

A. At present we are engaged in putting in the sewers and water systems for the Fort Peck development for the Government.

Q. How big a job is that?

A. It amounts to a little over \$300,000.00. We recently—well, about two years ago, it was, completed a water supply for the City of Lincoln, \$1,500,000.00. This past year we have just completed two P. W. A. jobs in the city of Lincoln, involving hand labor water mains, amounting to \$120,000.00. There are quite a number of projects, if you want me to go into that.

Q. Well, I don't know that will be necessary. But could you total about how much construction work you have done in the last three or four years, or some such period of time.

A. Oh, I would say in the last three years we have done

about Five Million Dollars worth.

Q. Now, besides your connection with these construction concerns in Lincoln, are you affiliated with any other business enterprises in that city?

A. Yes, I am a director and member of the executive committee of the First National Bank; a director of the First Trust Company; director of the Mid-West Life Insurance

Company.

- Q. In addition to doing the construction work at Sweet-[fol. 2769] water, Dallas, Tyler, and the other places you mentioned, are you in general familiar with the soil conditions encountered in the north, central, east and west central portions of Texas?
- A. So far as I could observe from a trip over the territory?

Q. When was that trip made?

A. That was made in May, 1933.

Q. What was the purpose of the trip just mentioned?

- A. To acquaint me with the terrain of the pipe lines, through which the Lone Star Gas Company serves gas to its people.
- Q. You made this trip over the system with Mr. Nichols, did you not?

A. Yes.

Q. Now, what information were you given about the Lone Star Gas Company system, in general, before you started your trip?

[fol. 2770] A. Just shown a map of the system.

Q. Had you been given any sort of specifications or instructions as to the size of trench, the kinds of excavation, and things of that sort?

A. Not prior to the trip.

Q. The trip was made primarily for the purpose of finding out the general topography of the territory covered by the system, and of the soil conditions, wasn't it?

A. That's right.

Q. Now, how many days did you spend on your inspection of the system?

A. Three.

Q. Three days?

A. Yes.

Q. Just point out, now, to the jury—right behind you, Mr. Dobson, there is a map of the system. Locate, if you can, where you started, and in general show the jury how you went.

A. May I refresh my memory with my own notes?

The Court: Yes.

Q. If you have a smaller map, make use of that, yes. And if you made any detailed inspections at any particular point, will you call attention to where those points were located, please sir?

A. Yes. Would you prefer that I show it on the map, or

just tell where it was?

Q. Just tell where the points were located.

A. No. 1, B-16 inch. We drove from Forth Worth to No. [fol. 2771] 1 observation of Line B, 16 inch, near North Fort Worth Warehouse. Then drove by way of Saginaw to Observation No. 2, B 16 inch, near road crossing west of Ned Van Zandt home. Then drove by way of highway to Rhome, to No. 3 observation, b 16 inch near road running east and west from Rhome. Also No. 4, Second B, 20 inch, near northeast edge of Rhome. Then drove to Decatur, turning west on Bridgeport road. No. 5, B 16 inch and Second B, 20 inch, near crossing with Bridgeport-Decatur road. Then drove to Sunset, turning west on Chico road. No. 6, B 16 inch and B 20 inch at road crossing west of Sunset near small brook. Then drove to Bowie for lunch, and then along highway towards Wichita Falls. No. 7, B 16 inch and 20 inch near Bowie, Gate-crossing with Wichita Falls highway. Then drove on highway turning north at Henrietta to Petrolia compressing station. No. 8, B 16 inch, Second B 20 inch, A 18 inch, H 12 inch, and Second H 12 inch and field lines near Petrolia compressing Then drove along railroad to Wichita Falls. No. 9 A 18 inch near Wichita River crossing at Wichita Falls, near disposal plant. Then drove through Wichita Falls. and turned south at Iowa Park. No. 10, A 18 inch south of Iowa Park near Iowa Park tap. Then drove along highway to Oklaunion, No. 11, A-1 six inch at Junction of Oklaunion tap east of Oklaunion. Pointed out that A-1 six inch connected with A 18 inch only a short distance south. Then

drove to Vernon. No. 12, A 18 inch at road crossing east of Vernon. Then drove south to Mabelle, crossing over [fol. 2772] Lake Kemp dam, spending night in Abilene, and

that was the first day's trip.

Q. Now, just taking those observations, that far Mr. Dobson, you started in here at Fort Worth (indicating on map) and went up the Line B and Second B line, to Petrolia, where you inspected the H and Second H lines that come into Petrolia, and then went on up the A system to Oklaunion, where you got a look at the A-1 six inch, and then on up to Vernon, and that takes you to this point here, on the map?

A. Yes.

Q. And then you cut across the country from there to what point?

A. To Abilene.

Q. And that brings you to this point on the map (indicating)?

A. Yes.

Q. And then, starting in from there, how did you go?

A. We went East. Drove east from Abilene to Observation No. 13, Line 18 six inch and KC-8 inch at road crossing north of Elmdale. Then drove to Baird measuring station. Fourteenth Observation: 18- six inch and KC-8 inch near Baird measuring station. Then drove to Putnam. Observation: 18-6 inch near junction of Putnam tap. Then drove across country to Pueblo compressing station. 16th Observation: KC 10 inch and other lines near Pueblo compressing station. 17th observation: Lone Star Gas Company, W. H. Grove No. 7, south of Pueblo. Then drove to Lake Cisco, returning to Moran. No. 18: Line 30 six inch and other lines in the vicinity of Moran compressing station, north of Moran. Then drove across country to Breckenridge. 19th observation: Line O, 16 inch approximately [fol. 2773] 1000 feet east of Breckenridge compressing station. 20th observation was of Line 20, six inch at crossing with Highway No. 67 south of Breckenridge. 21st Observation was of Line K, 16 inch at crossing with Highway No. 67 south of Breckenridge. Then drove to Ranger compressing station No. 3. 22nd observation was KC 12 inch and other lines near Ranger compressing station. No. 23 was Line K, 16 inch at KC Junction east and north from Ranger. Then drove east from Ranger towards Thurber. 24th observation was Line K, 16 inch at KB-12 inch Junction, west of Thurber. Then drove through Thurber, Min-

gus and Gordon. 25th observation was Line O, 16 inch at Road Crossing near Gordon. Line K 16 inch also nearby. Then drove to Santo, turning south. 26th observation: Lines O, 18 inch and K 18 inch, near road south of Santo. No. 27 was of Line O, 18 inch and K 18 inch near Junction KA 12 inch near Lipan. Then drove through Lipan, Thorpe Springs, turning North at Granbury. No. 28 was Line O 18 inch and K 18 inch near road between Granbury and Weatherford. Returned to Granbury, turning west towards Fort Worth. 29th observation was Line O 18 inch and K 18 inch near intersection of Fort Worth-Granbury road. Drove east to Joshua compressing station. The 30th observation was of Lines O, 18 inch, K 18 inch, J 16 inch, O 16 inch, L 12 inch, and other lines near Joshua. We spent the night in Waco.

Q. Now where you said Zero, you probably meant Line O?

A. Yes, these are all designations of the different lines, so far as I know.

Q. Now, referring to the map, Mr. Dobson, you started [fol. 2774] in at Abilene and your observations covered all this territory in here at Breckenridge and Ranger, and the lines at that point, across on the K lines and Line O to Joshua, and then you came down the Lone Star system to Waco?

A. Yes.

Q. And that accounts for that part of the system.

A. Yes.

Q. From there on, how did you make your observations?

A. We went East to Dallas and then up North.

Q. From Waco where did you go?

A. 31st observation was Line L, 16 inch, and L-8 eight inch near Brazos River Bridge. Drove across country to Cooledge. 32nd observation was Line M-11 10 inch near Cooledge measuring station west of Cooledge. Then drove to Corsicana by way of Mexia. 33rd observation was M 8 inch near south side of measuring station at Corsicana. No. 34 was Line M-2 six inch east of Ennis. \* \* We had driven across country to Terrell; and No. 35 was O-29 six inch near Sanry.

[fol. 2775] A. Observation No. 36, O-3 six inch, and O-3-3 four inch near Terrell. Drove across country to Green-

ville. No. 37 was Line O-10 inch near highway west of Greenville. Drove across country to Bonham by way of Leonard. No. 38 was Line E, 10 inch near airport north of Bonham. Returned to Sherman, turning North. No. 39 was Line E 10 inch, E-2 six inch and E-2 ten inch at Whitesboro Junction north of Sherman.

The Court: What was that last?

A. I said we drove to Bonham by way of Leonard and observation 38 was of Line E 10 inch near airport North of Bonham.

The Court: No, at Whitesboro. Where is that Whitesboro Junction?

A. It's right East of Gainesville in Grayson county.

Mr. Fitzhugh: It is just about three miles here, as shown by the map. This Line E, ten inch, comes along and then there is a little spur that goes off to Whitesboro, about two or three miles, it looks like.

A. Drove to Gainesville by way of Whitesboro. No. 40 was E ten inch at highway crossing east of Whitesboro, and [fol. 2776] the 40th observation was Line E, 10 inch, Line F 16 inch, Line G 16 inch, near Gainesville Junction, south of Gainesville. Then returned to Fort Worth.

Q. Now just to show the line of these general observations, you started in at Waco, and cut across country and intersected at various points on these lines, at the various places you indicated in reading there where you made observations, and then came up to Greenville and crossed north of Greenville along the E 10 inch line, over to Gainesville and back in on the F lines, is that right?

A. Yes.

Q. Now, was the inspection that you made, Mr. Dobson, a longer inspection, or did you use more care in making this observation or less care than you would ordinarily use if you knew you were going to be asked to make bids for excavation work which would be necessary in the kind of work required to reconstruct the lines of the company? What I mean by that is, was this sufficient inspection, in your opinion, to get a good idea of the actual excavation consitions that would be necessary to build lines like the company has?

A. Under the specifications it was, with the specifications giving the classifications of soil and rock and so on.

Q. And you think your examination of the company's lines that you made was sufficient, taking into consideration the specifications you had been given?

A. Yes.

[fol. 2777] Q. Now, what are the specifications to which you referred?

A. I was handed these specifications by Mr. Nichols.

Q. Incidentally, in making this inspection, who accompanied you and Mr. Nichols?

A. Mr. Minter, I believe it was.

Q. This is an entirely separate examination from the examination of the company's system that Mr. Robinson, a witness who had already testified in this case, gave to the system, is it not?

A. He was not with us.

Q. Now, do you have with you the original specifications?

A. Yes.

Q. Will you kindly read those?

A. Yes. "Specifications for trenching, Lone Star Gas Company system. 1. Done by Other Contractors: (a) Right of way will have been cleared — feet with stumps out to ground and all boulders and other obstructions blasted and removed so that trucks can pass right of way and string [fol. 2778] pipe. Gates will have "been installed in fences, and fences cut for trucks, etc.

2. Machine Excavation. This Contractor (a) include in machine excavation price necessary blasting, grubbing for ditch and machine leveling up for machine, getting machine across obstructions, creeks, etc., necessary hand work at

obstructions, creeks, etc.

3. Hand excavation: This Contractor (a) Include in hand excavation price necessary blasting, rubbing for ditch.

- 4. Rock Excavation: This Contractor (a) Include in rock excavation price necessary grubbing for ditch, powder, compressors, caps, fuses, etc.
- 5. Backfill: This Contractor (a) Include in backfill price consolidated price to include backfill of machine, hand and rock excavation. Only one price to be applicable to all backfill. Where backfill is in rock, dirt is to be placed over pipe to a depth of at least six inches before placing rock in ditch.

6. Classification: Ninety per cent of the yardage has been classified by driving a bar down on either side of the ditch every 500 feet. All yardage below lowest point bar can be driven is classified as solid rock. Ten per cent of the yardage has been classified from construction records.

Hand excavation is on short lines where no machine is used at all—short taps—usually less than 100 feet in length.

7. Miscellaneous Items: This contractor is to clean up [fol. 2779] along ditch, shaping up backfill over ditch. This contractor is to furnish all labor necessary to lining up for trenching work, getting men, supplies, etc. to the work. The estimate is to include among other things your profit, overhead, wear and tear on equipment, necessary supervision, etc. Ditch is to be delivered in a smooth uniform condition.

Additional payment will be made for highway and rail-

road crossings.

This trenching is for gas line construction. Due consideration is to be given for delays usually incident to such construction.

Contractor will be required to give bond and to carry workmen's compensation, property damage, \$20,000.00

limit, public liability \$10,000.00 and \$20,000.00 limits.

The work will be done in units requiring an average of two machines for construction period of eight months. In general the eight months' period will be during spring, summer and fall.

The estimates are to be as of December 31, 1931.

Payment will be in cash on monthly estimates with ten per cent retained. Retainage in no event will be held longer

than one year.

8. Estimated cost as of December 31, 1931: 2,893,325 cubic yards of Machine Excavation, at — per cubic yard. 39,072 cubic yards hand excavation, at — per cubic yard. 342,911 cubic yards rock excavation at — per cubic yard. [fol. 2780] 3,275,308 cubic yards of backfill, at — per cubic yard.

Then there follows the total excavation quantities, the pipe, the clearing, and the trench sizes. Do you want me

to read those?

[fol. 2781] No, sir; you need not bother about that. Now, when you read the first part there, that "right of way will have been cleared blank feet", you had in mind that the right of way would be from twenty-five to thirty feet?

A. Yes, sir.

Q. What other information were you given after the original specifications?

A. I was handed this specification this morning.

Q. Will you tell the jury now what additional information is given you by those specifications?

A. Read the specifications?

Q. Yes, sir.

A. "Specifications for Trenching, Lone Star Gas Company System"-

Mr. Griffith: Wait a minute. Who gave you those, Mr. Dobson?

A. Mr. Nichols.

Mr. Griffith: The same Mr. Niehols?

A. The same Mr. Nichols. "1. Done by Other Contractors: (a) Right of way will have been cleared 20 to 30 feet with stumps out to ground and all boulders and other obstructions blasted and removed so that trucks can pass along right of way and string pipe. Gates will have been installed in fences and fences cut for trucks, etc. 2. Machine Excavation: This contractor (a) Include in Machine excavation price necessary blasting, grubbing for ditch and machine [fol. 2782] leveling up for machine, getting machine across obstructions, creeks, etc., necessary hand work at obstructions, creeks, etc. 3. Hand Excavation: This contractor (a) Include in hand excavation price necessary blasting, grubbing for ditch. 4. Rock Excavation: This Contractor (a) Include in rock excavation price necessary grubbing for ditch, powder, compressors, caps, fuses, etc. 5. Classification: 90 per cent of the yardage has been classified by driving a bar down on either side of the ditch every 500 feet. All yardage below lowest point bar can be driven is classified as solid rock. 10 per cent of the yardage has been classified from construction records. Hand excavation is in general on short lines where no machine is used at all, short taps being usually less than 100 feet in length. Some excavation is classified as hand on lines involving rock excavation. Some lines classified as 100% hand are a mile in length. 6. Miscellaneous Items: This Contractor is to furnish all necessary labor to lining up for trenching work, getting men, supplies, etc. to the work. The estimate is to include among other things your profit, overhead, wear and tear on equipment; necessary supervision, etc. Ditch is to be delivered in a

smooth uniform condition. Additional payment will be made for highway and railroad crossings. This trenching is for gas line construction. Due consideration is to be given for delays usually incident to such construction. Contractor will be required to give bond and to carry workmen's compensation, property damage \$20,000 limit, public liability \$10,000 [fol. 2783] and \$20,000 limits. The work will be done in units requiring an average of two machines for a construction period of eight (8) months. In general the eight months' period will be during Spring, Summer and Fall. The estimates are to be as of June 15, 1934. Payment will be in cash on monthly estimates, with 10 per cent retained. Retainage in no event will be held longer than one year. 7. The estimate of unit prices is to be as of June 15, 1934, based on the following approximate quantities: Machine Excavation, 2,533, 302.0 cubic yards; Hand Excavation, 74,265.0 Cubic yards; Rock Excavation, 355,367.0 cubic yards."

Q. Now, Mr. Dobson, besides that, you were given, were you not, excavation quantities by systems?

A. Yes.

Q: Showing the cubic yards for machine work, the cubic yards for hand excavation, the cubic yards for rock, and the total by lines?

A. Yes.

Q. You were given another tabulation by systems showing the total length of feet and the percentage of each system to the total?

A. That is right.

Q. You were given another tabulation showing the amount of clearing by systems, showing the per cent of the total length for the system to the whole, the per cent of clearing on [fol. 2784] each system, and the weighted per cent cleared?

A. Yes.

Q. You were given another tabulation, were you not, showing by systems the minimum depth and width and the maximum depth and width of trench by systems?

A. Yes.

Q. Now, do you and your partners own enough machinery to undertake an excavation project of this size?

A. Not if it all had to be done in eight months.

Q. How is that?

A. I say, not if it all had to be done in eight months.

Q. How many ditching machines do you have now, do you know?

A. Approximately thirty.

- Q. And approximately how many backfillers or machines of that kind?
  - A. Ten.
- Q. Using your own equipment, how long would it take you to dig a ditch of this size?

A. It would take two eight-month seasons.

Q. I understand this is a very large order of excavation?

A. It certainly is.

- Q. Now, did you, using those specifications and the number of units of the various types of excavation as given you, and from your general knowledge of the territory covered by the company's lines and from the information that you picked up on your inspection tour of the lines seen by you [fol. 2785] and inspected, arrive at some unit cost per cubic yard for the various types of excavation as applied to those unit costs?
  - A. As of June 15th?
  - Q. Yes.
  - A. Yes, sir.
  - Q. As of June 15th, 1934?
  - A. Y s.
- Q. What was the cost estimated by you for machine excavation?

[fol. 2786] Q. Mr. Dobson, you have done numerous jobs of cross-country work for the laying of other than gas pipes?

- A. Yes, sir.
- Q. Including water lines and sewer lines?
- A. Yes.
- Q. Can you see any difference from an engineering standpoint between digging a trench for a water pipe and another ditch of the same size for a gas pipe?
  - A. No, I can not.
  - Q. It costs just as much to dig one ditch as another?

A. Yes, I think so.

- Q. Well, now, Mr. Dobson, will you kindly tell us what allowance per cubic yard you estimated to be correct for machine excavation?
  - A. Twenty-eight and one-half cents.
- Q. What was the unit cost per cubic yard you found for hand excavation?

A. \$1.41.

[fol. 2787] Q. And what was the unit cost per cubic yard for rock excavation?

A. \$4.00.

- Q. Now, in general, will you describe how you went about estimating your cost of 28½ cents per cubic yard for the machine excavation?
- A. I figured an output for a trench machine of 280 cubic yards per day for an eight-hour day, figuring the expenses and dividing it into that yardage; I figured the operator, \$8.00 per day; helper, \$3.20; two men cleaning up the ditch back of the trencher, \$6.40; gas, \$4.80; oil, 80 cents; repairs, \$10.00; miscellaneous items, transportation, etc., \$6.00; cost of ownership of the trench machine, \$16.00; this is arrived at by using the A. G. C. Schedule cost of ownership. That gave me a total of \$55.20 for an eight-hour day. Divided by 280 yards, that is 20 cents per yard. In addition, I charged seven-tenths of a cent for grubbing right of way; eighttenths of a cent for insurance; 1.8 cents for superintendence, making a total cost of 23.34 cents, to which I have added 4.7 cents, 20 per cent, profit, making a total of 28.1 cents; to which I have added cost of bond, one and one-half per cent, which figured four-tenths of a cent, making a total of 281/2 cents.
- Q. In general, how did you find your unit cost for hand excavation?
- A. I had dug a trench just before that for the Lincoln, Nebraska, water supply line, using labor from the Labor Bureau there, to find the cost of ditching by hand labor, and [fol. 2788] arrived at a cost of 60 cents per yard on that line. That was on the basis of 30 cents per hour; the Code called for 40 cents, and I increased it, making 80 cents per yard; for insurance eight cents; tools, 15 cents; foreman and overhead, 12½ cents, making 1.15½, to which I added 20 per cent profit, 23.1 cents, making \$1.386, to which was added cost of bond, one and a half per cent, two and one-tenth cents, making a total of \$1.41.
- Q. Now, will you in general describe how you arrived at your cost of rock excavation?
  - A. That is a general estimate.
- Q. You have made a speciality, have you not, of machine excavation?

A. Yes, sir.

Q. So you would not be as sure of your rock price as you would on the machine?

A. No, sir.

Q. The four dollar cost for rock excavation is the price at which you would estimate you could do work of that sort?

A. I think I could.

Q. Now, either you or one of your partners has developed some sort of a ditching machine?

A. Yes, sir, the Humphries ditching machine.

Q. Who invented that?

A. Mr. W. G. Humphries of Omaha.

[fol. 2789] Q. He is one of your partners?

A. Yes, sir.

Q. Are you familiar with the type of machine known as the Buckeye ditcher?

A. Yes, sir.

Q. Have you used that machine?

A. Yes, sir.

- Q. What machine do you consider the better for machine excavation?
- A. Well, we have always considered the Humphries as more economical for our work.
- Q. Is you company or your companies, the ones with which you are associated, in financial position to undertake a construction job of this size?

Mr. Griffith: You mean the affiliated companies? Mr. Fitzhugh: Yes.

- A. We might have to have some help on a job of this sort.
- Q. I mean would you be able to undertake a job of this sort?
- A. I would not want to say as to that, because of the precarious condition of the bond market—I mean the effort that has to be made to get a bond of that size; probably I would have to call in somebody else.
- Q. You would be very glad, would you not, Mr. Dobson, to get a contract containing these unit costs as applied to this amount of excavation?
  - A. Yes, sir.
- Q. As of this date? [fol. 2790] A. Yes, sir.

#### Cross-examination.

### Questions by Mr. Griffith:

Q. Mr. Dobson, Lincoln, Nebraska, is quite a distance from Austin?

A. It surely is.

Q. How do you appear here on this 6th day of July, 1934?

A. At the request of Mr. Marvin Nichols.

Q. The same Mr. Nichols you previously referred to?

A. Yes, sir.

Q. In other words, Mr. Nichols, one of the engineers for the State, procured your attendance here?

A. Yes, sir.

Q. You have been a friend of Mr. Nichols for some time?

A. Yes, sir.

Q. Naturally, you want to assist him in any way you can?

A. Well, I don't know-

Q. I mean legitimately, of course?

A. Yes, sir.

Q. You have acted as a contractor on several municipal engineering jobs of sewerage or water plant construction where Mr. Nichols has been one of the engineers, have you not?

A. ·Yes, sir.

Q. You hope to act in that capacity in the future?

A. I will be glad to.

[fol. 2791] Q. What insurance rate did you use in computing your unit costs per cubic yard for hand excavation and machine excavation?

A. Ten per cent.

Q. Ten per cent of the direct labor?

A. Yes, sir,

Q. Is that the insurance rate that you are paying?

- A. No; that is the rate used a year ago from the Manual at that time. I was not able to verify it in Texas. I thought that was approximately correct.
- Q. Do you know whether that is the Manual rate in Texas now?

A. No, I don't know.

Q. Now, I don't understand from your testimony, as to whether you are testifying on the cost of excavation solely with reference to the company's properties in Texas, or

whether you are also testifying as to its system in Oklahoma?

A. Well, it is only as to that in Texas.

- Q. In other words, the Nichols specifications handed you this morning relate only to the excavation in Texas? -
  - A. That is right,
- Q. Now, when you appeared before the Railroad Commission of Texas—or did you appear before the Railroad Comfol. 2792] mission of Texas in connection with this investigation of Lone Star Gas Company's rates?

A. Yes, sir.

Q. You appeared at that time at Mr. Nichols' request?

A. Yes.

Q. And testified as to unit costs of excavation?

A. Yes.

Q. Now, your testimony at this time is that your estimated cost of machine excavation would be 28.5 cents per cubic yard?

A. Yes.

Q. What did you testify before the Railroad Commission for the cost of machine excavation about a year ago?

A. Twenty-one cents.

Q. Your testimony is that the cost of hand excavation, or, rather, your estimate would be \$1.40 per cubic yard?

A. Yes, sir.

Q. What was your estimate when you testified before the Commission a year ago?

A. 98.5 cents.

Q. Your testimony today is that your estimate of the cost of rock excavation would be \$4.00 per cubic yard?

A. Yes, sir.

Q. What did you testify as to that before the Commission?

A. \$3.00.

Q. Your figures are for over-all something in excess of thirty-five per cent of the costs of excavation as computed by you a year ago?

[fol. 2793] A. I think it would be a little under that, wouldn't it?

Q. Well, it is a mathematical calculation.

A. Around thirty per cent, I think, because machine excavation is the large item.

Q. Well, that is up thirty-three per cent, isn't it?

A. Yes, sir.

Q. So it would be around thirty-five per cent?

A. Around thirty-five per cent.

[fol. 2794] Q. Now, in connection with these excavation costs that you have testified to, how long would you be willing to maintain the open ditch after it was dug?

A. Not very long.

Q. Well, how long?

A. Oh, twenty-four hours.

Q. Twenty-four hours—in other words, if the ditch caved in after a period of twenty-four hours, why, you would want to be paid extra for cleaning out that ditch?

A. Yes, sir.

Q. And if, due to the necessities of pipe line construction, the pipe could not be laid within twenty-four hours after you had excavated the ditch, you would assume no responsibility?

A. That would be right.

- Q. Now, where, if at all, in connection with your allowances for excavation per cubic yard have you made provision for the hauling in of dirt for the bedding of pipe and rock?
- A. That didn't enter into the specification on excava-
  - Q. In other words, it was not in the specifications?

A. No.

Q. And, as a consequence, you made no inclusion of any [fol. 2795] allowance for that item?

A. No.

Q. How much bell hole excavation did you figure on in making your estimates?

A. Only so much as could be handled by two men back of the machine.

Q. Only so much as could be handled by two men back of the back-filling machine?

A. No, behind the trenching machine.

- Q. Behind the trenching machine. Well, how would the two men behind the trenching machine know where to dig the bell holes?
  - A. They would have to be staked out by somebody.
  - Q. They would have to be staked out by somebody?

A. I think so.

Q. And that is the only time you would know where the bell holes should be dug?

A. Why, I should think so.

Q. In other words, frankly, any allowance for bell hole excavation is only such as could be done by the two men following immediately behind the trenching machine?

A. That is right.

[fols. 2796-2797] Redirect examination.

## Questions by Mr. Fitzhugh:

Q. Now, Mr. Dobson, you have included in these unit costs an allowance for contingencies, have you not?

A. Yes.

Q. A 20 per cent contractor's profit, I believe you say.

A. Yes.

Q. And in your rock excavation unit costs, besides the 20 per cent contractor's profit you have kept for yourself, you have put in there enough to cover the subcontractor's profit, have you not, where that work would be sub-contracted?

A. Well, that was only in case of the rock.

Q. Well, I say, in case of the rock, yes, sir.

A. Yes, sir.

[fol. 2798] Q. Suppose that through the rock excavation there should be two inches of soil, which is bedding, and [fol. 2799] for the quantities of rock excavation shown some of this soil would have to be hauled in, and that some of this soil would have to be hauled in—would your contingencies for rock excavation be sufficient in your unit costs to cover that item?

A. I don't believe they would. I have made no provision.

Q. If in addition to the specification given you, it should be specified that there should be two inches of bedding in the trench where rock excavation was necessary, and assuming, if, as you say, that your contingencies may not cover that item—I will ask you if you would still be willing to undertake the rock excavation at the unit costs you have

got, without any addition, but instead let your profit absorb that much?

[fol. 2800] The Witness: Well, if my getting the job de-

pended upon that, I probably would.

Q. Now, ordinarily, as a matter of fact, Mr. Dobson, you know from your experience, do you not, that the cost of bedding soil or dirt for the pipe being laid through rock excavation is usually included in the cost of backfilling rather than as a cost for rock excavation?

A. Yes, I do.

Q. And it would be a most unusual thing on specifications on trench work for rock excavation to include any cost of that sort in the unit costs for rock excavation?

A. I would think so; it would have to be put back.

Q. And not having prepared any cost of backfilling which would normally include this bedding cost, you naturally did not consider that in this estimate, did you?

A. That is right.

[fol. 2801] S. W. Freese, a witness for plaintiffs, having been duly sworn, testified as follows:

Direct examination.

## Questions by Mr. Fitzhugh:

Q. Will you please state your name?

A. S. W. Freese.

Q. Where do you live, Mr. Freese?

A. Fort Worth.

Q. What is your business?

A. Civil Engineer.

Q. Are you connected with any firm?

- A. I am a partner in the firm of Hawley, Freese & Nichols.
- Q. What are the full names of the persons comprising the partnership?
  - A. John B. Hawley, Marvin C. Nichols, and myself.

[fol. 2802] Q. All of Fort Worth, Texas?

A. All of Fort Worth.

Q. How long has your engineering firm been organized

and doing business?

A. Mr. Hawley has been doing business in Texas since 1895; I came with him in 1921, and became a partner in 1923; and Mr. Nichols came with us in 1928.

Q. The Mr. Hawley to which you refer is the Major Haw-

ley generally known over the State?

A. He is the senior member of the firm, yes.

Q. Where did you receive your education?

A. At the Massachusetts Institute of Technology.

Q. Did you obtain a degree from that institution?

A. Yes. in 1921.

Q. Did you do any special work at any universities, after graduating from that school?

A. Yes, I did some graduate work at the University of

Cambridge.

Q. Cambridge, England?

A. Yes.

Q. Now, after you had finished your education, tell in a general sort of way Mr. Freese, what your engineering

experience has been.

A. Beginning in 1921—I should say that this work I did at Cambridge came later on, after I had worked with Major Hawley for some time. In 1921 I went as Assistant [fol. 2803] to the Lamar County, Texas, Highway Engineer on county bridge and concrete highway projects. latter part of that year I became Assistant to John B. Hawlev in the design and supervision of the Paris, Texas, waterworks, consisting of a dam, filtration plant, pumping equipment, supply mains to the city, elevated tank, and distribution system,—costing approximately \$1,000,000.00. In 1922 I was associated with Hawley and Sands—Mr. Sands being of Houston-in the design of the Fort Worth, Texas, sewerage system, costing \$1,200,000.00. In 1923 I worked with Mr. Sands in the design and supervision of the Center, Texas, water and sewerage system; and also in 1923 I was associated with Hawley and Sands in the design and supervision of the Lubbock, Texas, water and sewerage system; and worked on the Sweetwater, Texas, filtration, and the Stamford, Texas, disposal plant. I was associated with Major Hawley in the design and supervision of the Breckenridge, Texas, storm sewer and paving system, costing \$900,000.00. In 1923 we made an appraisal of the Arlington Heights Water System at Fort Worth, which I supervised.

In 1924, after I became a partner with Major Hawley, we made a redesign of the water distribution system and [fol. 2804] sewerage system for the City of Fort Worth, and assisted in the supervision of that work. This project amounted to \$2,950,000.00. In 1924 and 1925 we designed and supervised the street paving and other improvements at Lubbock, costing \$600,000.00. And in 1924 and 1925 we designed and supervised a \$500,000.00 water plant and distribution system for Austin, Texas. In 1976 we designed and supervised the sewerage system costing \$350,000.00 at Corpus Christi, Texas. In 1926 we designed and supervised additions to the water supply at Tyler, Texas. In 1927 we made appraisal of the Raymondville waterworks. In 1927 we designed and supervised water supply improvements at Graham, Texas, including a \$250,000.00 dam, and water supply main to the city. In 1927 we were engineers on storm sewers for Amarillo, Texas, costing \$500,000.00. Beginning in 1927 we designed and supervised the construction of two dams in Wise and Tarranty Counties, for the water supply and flood control protection of the City of Fort Worth, costing \$6,500,000.00. That work is just now being completed, but it started in 1927. In 1928 we were engineers on additional sewerage work at Fort Worth, costing \$800,000.00. In 1928 we were also engineers for the [fol. 2805] City of San Antonio on sewerage work costing \$1,250,000.00. In 1928 we were engineers on water system improvements for Big Spring, Texas, this work being done for the Texas & Pacific Railroad. In 1928 we made an appraisal of the sewerage system of Coleman, Texas. In 1928 we were engineers with Mr. W. W. McClendon on waterworks improvements at Corsicana, Texas. In 1928 we made an appraisal of the Red River bridge at Terral, Oklahoma; and appeared before the War department in connection with that appraisal. In 1929 we were engineers on flood protection works at San Antonio, costing \$500,000.00. In 1929 Mr. Nichols came with the firm, and in that year we were engineers on the water filtration plant and sewerage disposal plant at Sweetwater, costing \$700,000.00. In 1929 we were consulting engineers on the Waco filtration plant. the actual design and supervision being done by Floyd and Lochridge. In 1929 we designed and supervised the Rio Grande City and Harlingen waterworks improvements. In 1929 we designed a storm sewer system for Cuero, Texas.

In 1929 we made an investigation and report on flood control works for Oklahoma City, Oklahoma. Also that year we were consulting engineers on a disposal plant for Waco, Texas. [fol. 2806] Also for Graham, Texas, on drainage and paving improvements. We made that year an appraisal of the Vernon, Texas, water and sewerage systems. In 1930 we made an appraisal of the San Saba waterworks. Also in 1930 we designed and supervised the water system and sewers for Refugio, Texas. The same year we made an investigation for the City of Austin, on the Austin dam. In 1930 we built a water well to increase the water supply at Gainesville, Texas. In 1930 we made an appraisal of the Rosen Heights water system at Fort Worth. We also designed, in 1930, an addition to the filtration plant at Beaumont, Texas. In 1930 we were engineers on a sewerage system for Big Spring, which was an addition to their sewerage system. In 1930 we handled sanitary sewerage improvements for the City of Dallas, Texas. In 1931 we designed and supervised an enlargement of the filtration plant at Fort Worth, Texas, costing \$500,000.00. We were also engineers for a dam on the Waggoner Estate at Vernon, Texas, costing \$100,000.00. We designed also in 1931 a filtration plant at Chickasha, Oklahoma. Also we designed, and I think assisted in the supervision, but anyway we [fol. 2807] designed the boulevard system, paving and bridges out through the University Campus, there where they remodeled the Campus. In 1931 we designed and supervised the storm sewers and paving for Refugio, Texas. Also designed the new Dallas sewage treatment plant, at an estimated cost of \$1,250,000.00. That plant has not been built as yet, but we designed it. In 1931 we started an appraisal of the Texas properties of the Lone Star Gas Company for the Railroad Commission of Texas. We were engineers for water and sewer improvements at Gladewater. We appraised also in 1931 the Royse City gas distribution system. We made an appraisal of the telephone and power lines and railroad properties and pipe lines in the Bridgeport and Eagle Mountain Lake Basins,—those properties being worth approximately \$300,000.00. In 1932 we made an appraisal of the gas system at McLean, for the City of McLean. In 1932 we made an appraisal of the properties of the Municipal Gas Company for the City of Sherman, Texas. In 1931 we made an appraisal of the



Oklahoma properties of the Lone Star Gas Company for the Railroad Commission of Texas, and also for the Corporation Commission of Oklahoma; and concerning which [fol. 2808] we testified before the Corporation Commission of Oklahoma. In 1932 we made an appraisal of the Meridian Gas Company properties of the Lone Star Gas Company for the Railroad Commission of Texas. In 1933 we made an appraisal of the Community Natural Gas properties for the City of Sweetwater, Texas. In 1933 we designed a sewerage system for Pilot Point, Texas, and a waterworks and sewerage system for Bryson, Texas, and a waterworks and sewerage system for Bridgeport, Texas,—on which we were awarded contracts last week. We also designed the waterworks and sewerage system for Big Sandy, Texas. In 1933 we made an appraisal of the Municipal Gas Company properties at Denton, Texas, for the City of Denton. In 1933 we started an appraisal of the Corsicana plant of the Municipal Gas Company for the City of Corsicana,—that appraisal is just now being finished. In 1933 we also made an appraisal of the Canadian, Texas, gas distribution system properties of the Public Service Company. In 1934 we designed for the City of Lubbock, Texas, a gas distribution system, and a gas supply line from New Mexico, from the gas field known as the Jal-High area. Also in 1934, in connection with W. D. Howren, of Amarillo, Texas, we designed gas systems for San Saba, Lometa, Lampasas, Gold-[fol. 2809] thwaite, Fredericksburg, Burnet, and Llano. This work was done for these cities for the purpose of obtaining a loan from the Federal Government with which to construct gas distribution systems at those cities. 1934 we have designed with Mr. H. N. Roberts a supply line from the new Lake Sweetwater, which we built for the City of Sweetwater, to the City of Sweetwater. During this year we have made an appraisal of the Waco, Texas, plant of the Texas Cities Gas Company, for the City of Waco, Texas. Also, during the first part of this year and up until I came to Austin on this case, I had been retained by the Government Commission consisting of Ex-President W. B. Storey, of the Santa Fe Road, Professor Daniel W. Mead, of the University of Wisconsin, and Major General Koutz, to prepare estimates and check plans for \$21,000,000.00 worth of sewerage work at the City of Chicago, now being financed by the Federal Government. That brings me up to date.

### [fol. 2810] By Mr. Fitzhugh:

Q. The last piece of work you referred to, and which you said you had just completed before coming down to start in this case was work that you did for the Chicago Sanitary District, did you not?

A. It was work done on the Chicago Sanitary District;

however, it was done for a Government commission.

Q. Now, then, from the experience that you have had, and which you have just detailed to the jury, Mr. Freese, do you feel that you can accurately estimate the costs of excavation as they would be incurred on the building of a pipe line system similar to that of the Lone Star Gas Company system?

A. Yes; from the data which we have gathered and the information furnished us by contractors, I feel that I can

make a fair estimate of what the work should cost.

Q. And from an engineering standpoint do you feel like you could accurately estimate the costs of construction of the various kinds of property such as the Company has to make up its integrated system as it is today?

A. Yes.

- Q. Do you feel that your familiarity with the kinds of property and the types of material that would go into a system of this sort is such that you could properly price, apply the proper discounts, and obtain as unit costs for the property as installed, the proper costs as they would be incurred in a reconstruction of the Company's property? [fol. 2811] A. I do.
- Q. Now, have you made an investigation of the Company's property to arrive at a value on a reconstruction basis as of today?

A. Yes.

Q. What is the date of your appraisal?

A. It is dated June 15, 1934.

Q. Have your findings been incorporated into an exhibit for introduction in this cause?

A. Yes.

- Q. The exhibit to which you refer is entitled on its cover sheet, "Lone Star Gas Company, Texas Gathering, Transmission, Compressing and General Property, Reproduction Cost New Appraisal, June 15, 1934. Hawley, Freese and Nichols, J. A. Phillips Co."?
  - A. That is correct.

Mr. Fitzbugh: I will introduce the exhibit so identified in evidence.

(Thereupon the document referred to above was marked for identification as Plaintiff's Exhibit No. 6.)

# [fol. 2812] Examination by Mr. Griffith:

Q. Mr. Freese, does the exhibit just identified by you and tendered in evidence purport to be a reproduction cost new appraisal as of June 15, 1934, covering the public service property of Lone Star Gas Company which is geographically situated in the state of Texas?

A. Not exactly. There are certain sections of some of the lines, like Line A-14, where I have taken a junction between

that line and Line A as the division point.

Q. And it does not include all of the lines and property

of the Company located in the state of Texas?

A. No; but it does include the section of Line A that goes through the corner of Oklahoma.

Q. That is main line A?

A. Yes; main line A, 18-inch.

Q. In other words, it is a sort of hodge-podge, in that you have some property in Oklahoma included in your Texas property, and some of the property that is actually geographically located in Texas you have not included in this

appraisal?

- A. There are some small remnants of Oklahoma property which I felt should properly—or rather some remnants of small lines in Texas which I thought should properly be allocated to Oklahoma property. On the other hand, that Line A I thought should be allocated to Texas properties, and I have so done.
- Q. Mr. Freese, I have listened with a great deal of in-[fol. 2813] terest to the recital of your experience as an engineer, but it was not apparent just what experience you had had in connection with the construction of natural gas properties. Have you ever constructed any natural gas property?

A: No. The companies do not usually retain outside

firms, but do most of this work themselves.

Q. Have you ever been engaged in any phase of the construction of natural gas pipe lines or compressor stations?

A. No.

Q. Have you ever been identified with the ownership, operation, management, or control of any natural gas enterprise of any kind or character?

A. Lately we have designed some gas systems, including a transmission line to Lubbock and a distribution system

there.

Q. Those plans are merely paper plans, are they not?

A. They are. They have been checked by the Government for the purpose of making a loan to the city of Lubbock.

Q. Have you ever actually designed the construction of any natural gas property that has ever been built?

A. We have never actually constructed any natural gas

property.

Q. Have you ever prepared designs or plans for any natural gas property which was built in accordance with your plans or designs?

A. No.

Mr. Griffith: If Your Honor please, we will object to the [fol. 2814] introduction in evidence of the exhibit just identified by the witness Simon W. Freese, styled on the title cover "Lone Star Gas Company, Texas Gathering, Transmission, Compressing and General Property. Reproduction Cost New Appraisal, June 15, 1934," for these reasons: In the first place, the appraisal so-called is wholly irrelevant and immaterial and not competent for the proving of any issue made by the pleadings in this case, it purporting to be by the name an evaluation solely of the Texas property of the Lone Star Gas Company, and that would not furnish us a segregation of property which would be used and useful in connection with the interstate and intrastate · operations, respectively, of the defendant Lone Star Gas Company. Objection is further made for the reason that the witness is not qualified as an expert to prepare and present and testify in respect of a reproduction cost appraisal of the Company's property.

The Court: The objection is overruled.

Mr. Griffith: Note our exception. And will it be understood, so that the witness and counsel for the State will not be interrupted, that our objection will continue to run to all testimony in aid of, in explanation of, or in amplification of the exhibit so tendered?

The Court: Yes, sir.

#### [fol. 2815] Direct examination continued.

#### Questions by Mr. Fitzhugh;

- Q. Now, Mr. Freese, will you turn to your exhibit—the first sheet inside the title page—what do you show on that sheet?
  - A. That is the table of contents.
- Q. The next page, which is numbered page 1, represents what?
- A. It represents a summary of the reproduction cost new as of June 15, 1934 of the Texas Gathering, Transmission, Compressing, and General System Property of Lone Star Gas Company.
- Q. The detail sheets which make up the items shown in the summary follow this page 1, do they not?
  - A. That is correct.
- Q. Now, take up the items in order and make the explanation that is necessary to show the jury what you have done in this exhibit.
- A. On pages 1 and 2 is given the summary, the total for the properties, as shown on page 2, being \$40,256,862.39. Now, throughout this exhibit, wherever it has been possible, and where I thought that the prices used in the Company's Exhibit 28 were fair and reasonable, I have accepted and adopted those figures. That will explain the absence of detail in a great many instances. Where there has been any deviation I have shown in detail the exact prices which we have used.
- [fol. 2816] Q. Now, in the case of items of property or classifications of property where you have not made a change, you don't intend to say, do you, that you accepted all of the calculations that went into the Company's exhibits, or as testified to by Company witnesses who have appeared heretofore in this case; but only that you have accepted their end result?
  - A. That is correct.
  - Q. Now, will you proceed?
- A. I should explain first just how we have segregated the properties. We have assumed that the Line A, which comes down through the corner of Oklahoma, should be charged in its entirety against the Texas properties. However, we have not assigned any of this pipe line capacity, or of the cost of this pipe line, for the bringing of gas

to the end of the Hollis, Oklahoma, tap; nor have we allocated to the Oklahoma properties any of the Line A which brings gas to the junction between "A-1" six inch and "A" Main Line. We have, however, cut off the Line A-1 six-inch at the junction and assigned all of that property to Oklahoma. We have cut off Line H at the junction here at Petrolia and have assigned all of that line to the Oklahoma operations. However, in segregating the Texas properties we have not charged against the Oklahoma operations or the Oklahoma properties any of the compressor station capacity at Petrolia, nor have we charged against the Oklahoma properties any of the Lines B and 2nd B used for the transportation of Oklahoma gas that came [fol. 2817] down through that line. The same way with Line G. We have cut line G off at Gainesville, charging this part of the line to Oklahoma, and charging all from that point south to Texas, making no charge or allocation of any part of the capacity of this line which handles Oklahoma gas.

Mr. Griffith: You refer, Mr. Freese—I want to understand this, Mr. Freese—in other words, included in your appraisal is nothing for that part of the line G in Texas which extends from Gainesville to the Red River?

A. That is correct. That has been charged against the Oklahoma properties.

Mr. Griffith: Mr. Freese, as I understand your answer to my question, you have included in your exhibit here, which has been marked Plaintiffs' Exhibit 6, no part of the evaluation of Line G, a 16-inch line extending from the city of Gainesville north to the Red River?

A. Well, I should perhaps phrase my answer this way: That the only part of the Texas properties which we have charged against the Oklahoma operations is this section of the line which handles Oklahoma gas exclusively.

The Court: What part is that?
[fol. 2818] A. That is the part between Gainesville and the Red River that handles Oklahoma gas exclusively, or substantially exclusively, and we have assigned that to Oklahoma; but we have made no charge of that portion of the line south and east of there which transports Okla-

homa gas to the Oklahoma properties. In other words, we have charged one hundred per cent to these lines against the Texas properties.

The Court: Let me get it clear.

Mr. Griffith: All right.

The Court: As I understand it, that part of that line down to Gainesville is charged exclusively to Oklahoma?

A. That is correct.

The Court: And that line south and east of Gainesville is charged exclusively to Texas and none to Oklahoma?

A. That is correct, on this theory, that since that Line G from the Red River to Gainesville was handling Oklahoma gas one hundred per cent; and although the line south and east of there handled Oklahoma gas to a certain extent, we have not charged any portion or any allocation of those properties to Oklahoma.

The Court: Do you know, or can you tell me the distance of that line north from Gainesville to Oklahoma, that you

have charged to Oklahoma?

A. I cannot tell you exactly, but it is approximately sixteen miles.

[fol. 2819] Q. Using that method you simply assumed that all of the gas coming through Line G is one hundred per cent Oklahoma gas all the time?

A. That is correct.

Q. Notwithstanding that there is some testimony that occasionally there may be some north-bound gas in line G?

A. That is correct; and the same way with Line E-5 sixinch, we have charged all of that line to Oklahoma at the junction with "E" 10-inch, a short distance there of two or three miles, that line being used wholly for the transportation of gas delivered in Oklahoma. However, we have made no charge against Oklahoma of any part of Line E ten-inch which brings gas to the junction.

The Court: Where is that place?

A. The junction is east of Denison about five miles, and about three miles from the River. And similarly, with the line up into Hugo, which delivers Oklahoma gas exclusively; [fol. 2820] or rather, the gas delivered is gas used in Oklahoma. We have excluded that line, but have made no charge

against the Oklahoma property for bringing the gas to the junction. And similarly with the Gainesville Compressor Plant, although that compresses some Oklahoma gas, we have charged the entire Gainesville Compressor Plant against the Texas properties.

Q. Is there any additional explanation you care to make as to your summary?

A. No; I think we will get to each item.

Q. The first item appearing in the detail sheets appears

on page 3 as Gathering System Rights of Way.

A. Yes; for Gathering System Rights of Way, for Field Measuring Station Structures, for Field Measuring Station Equipment, and Field Line Equipment, also Transmission Measuring Station Land, Transmission Measuring Station Leaseholds, Other Transmission System Land, and Other Transmission System Leaseholds, we have accepted the figures shown in the Company's Exhibit 28. Now, we have eliminated from those what are known as the Petrolia Field Gathering System Rights of Way and Field Line Equipment.

[fol. 2821] Q. That covers the first eleven pages?

A. Yes.

Q. What-That is, the detail sheets, from page 3 through

page 11, inclusive?

A. Yes. The reason that we have eliminated the Petrolia field lines which make up the principal item, is by reason of the fact that the actual out of pocket operating expenses in this field have exceeded for the past three years at least, the years for which we have records, the value of the gas in that field. For the year 1931, the cost of producing gas in that field, the actual out of pocket expense, was \$23,307.64; the value of the gas was \$21,960.72. For the year 1932, the operating expenses were \$22,508.82, and the value of the gas was \$13,934.04. For the year 1933, the operating expenses were \$21,633.92, and the value of the gas was \$16,-634.82. That field has just about played out, and is now operating at a pressure very much lower than that at which fields are usually abandoned. For that reason we did not regard this property, by and large, as being useful in the public service operations. However, I should add in that regard that we have allowed the full salvage value of all the property in the Petrolia field as part of the working capital.

Q. Now on page—On no page, of the pages 3 to 11 inclusive, would there be any mention of the Petrolia account, would there?

A. No.

[fol. 2822] Q. Nor of the Petrolia field property?

A. No.

Q. Because of this elimination which you have just stated?

A. That is correct.

Q. Now, just to make the matter clear, Mr. Freese, you had better take these pages one by one; beginning with page 3 and show just what you do show on those pages.

A. Well, for gathering system rights of way, the three other fields in Texas other than the Petrolia field are the Pottsboro, the Panhandle and the West Texas fields. There are shown for the Pottsboro field rights of way \$132.60; for the Panhandle field \$2,778.00; and West Texas, \$6,269.01. These are the figures shown in the company's exhibit, and were arrived at on the basis of taking three times the cost of the payment to the land owner for the right of way. The total of \$9,179.61 is carried back to the summary page and is shown under gathering system property, rights of way, at \$9179.61.

For field measuring station structures, we show a total of \$27,319.78. This is also carried forward to the summary page. Similarly, for page 5, for the field measuring station equipment, total of \$93,943.02 is carried forward to the

summary sheet.

Q. And the same for page 6?

A. For field line equipment; a figure of \$205,731.85, being the total taken from the company's Exhibit 28. Similarly for the Pottsboro and West Texas fields. Now, when it comes to transmission system measuring station land, the [fol. 2823] totals could not be taken from the company's Exhibit 28, so we have shown for each town the value of the transmission measuring station land, or rather, the reproduction cost new of the transmission measuring station land as shown by the company's Exhibit 28. For example, on the A system, A-1-1 Oklaunion, \$426.89; that figure of \$426.89 includes the cost of the land as actually paid for the land, plus the cost of purchase, which was 15 per cent, with a minimum of \$25.00, plus the reproduction cost new of the improvements. However, that total of \$426.89 is shown in the company's Exhibit 28. On the A system, there being some transmission land in Oklahoma, we have shown

that by individual measuring stations. On the B system and C system, there being no property in Oklahoma, we have taken the totals. On the E system, there being property in both Oklahoma and Texas, we have divided that up, item by item. The total on the next page, page 8, of \$82,596.45, is carried forward to the summary sheet.

Q. Now, in the case of the B, C, F, J, K, L, M, O, R and numbered systems, you have taken the figures exactly as they show in Defendant's Exhibit 28, have you not?

A. That is correct.

Q. Now, on page 9 what does the detail on that page show?

A. Page 9 shows the transmission system measuring station leaseholds, and this was arrived at in exactly the same way as the transmission measuring station land. The values, or rather, the reproduction cost new figures shown on that page include the improvements at each of the meas-[fol. 2824] uring stations listed, plus the unexpired value of the leaseholds, that unexpired value being taken as given in the company's Exhibit 28.

Q. Proceed to the next page.

A. Other transmission system land. This page shows each item of property of the company listed as other transmission system land and includes all of the other transmission system land in the State of Texas. The same explanation is applicable to other transmission system leaseholds shown on page 11.

Q. Now what do you show on pages 12 and 13?

A. On pages 12 and 13 we show the transmission system rights of way, with the roddage for each line and the cost, based upon the actual cost to the company as experienced by the company in a study of those costs. It does not include the twenty per cent contingent item allowed by the company for condemnation suits which they figured might be incurred in a wholesale reproduction cost, but which were not actually incurred in the past.

Q. Why did you feel, Mr. Freese, that you were not justified in leaving in that twenty per cent for condemna-

tion costs?

A. Well, in the first place, it is purely a matter of policy with the company whether they pay what the land owner asks, and avoid condemnation costs, or whether they take the risk of trying to get a lesser cost through the courts.

No condemnation costs were actually incurred on the lines studied by the company, and if they use the same policy and the same methods in procuring the rights of way under [fol. 2825] reproduction cost new, no such costs would be incurred. Furthermore, these rights of way costs which run from 92 cents, or rather, from 83 cents to 92 cents per rod, are made up largely of labor costs, the actual payment to the land owner being approximately 25 cents per rod. Those actual purchases studied were made in the years 1929 and 1931, when labor costs were somewhat higher than they are now. Furthermore, the lines studied had an average length of 109 varas, whereas the average length on the system as a whole is 139 varas.

Mr. Griffith: You say the lines; don't you mean the rights

of way?

A. Yes, the rights of way; however, the right of way is almost identical or equal to the length of the lines, except for road crossings and such deductions as that.

The Court: Did you say 109 varas?

A. Yes, 109 varas. The Court: Varas?

A. Yes, that is the way they measure these rights of way.

The Court: I just wanted to understand the word. It's a land measurement term, and I didn't know whether I understood you correctly or not.

- Q. To illustrate, now, Mr. Freese, on the A system, main line per rod, you used a cost of \$.9258?
  - A. That is correct.

Q. How did you find that unit cost?

A. Well, that is the cost used by the company in their [fol. 2826] Exhibit 28 before the addition of the 20 per cent.

- Q. So it is the same cost as has already been testified to by the company witnesses?
  - A. Yes.
  - Q. Minus the 20 per cent addition for contingencies?

A. Yes.

Q. Now what do you show on pages 14, 15 and 16?

A. Pages, 14, 15 and 16 show the reproduction cost new figures for the transmission system measuring station structures, on the A system, E, G and H systems, parts of which are in Oklahoma and parts of which are in Texas, and there we show the individual measuring station locations, with the reproduction cost new at each station. For the B sys-

tem, the C system, F system, the J, K, L, M, O, R and the numbered systems, the Government ten inch line, and the T. P. U. system, we show the totals, as none of the measuring stations on these lines is in Oklahoma.

- Q. What do you show on page 17?
- A. Page 17 shows the other transmission system structures.
- Q. Now, on the A system, you show the Byers cleaner house, and Petrolia cottage No. 41 as a deduction, do you not?
- A. No, those are the only two items on the H system which we have included in the Texas properties, and the rest of the other transmission system structures on the H system being located in the State of Oklahoma, and being applicable to the Oklahoma properties.

[fol. 2827] Q. On pages 18, 19 and 20 what is shown?

- A. On pages 18, 19 and 20 are shown the transmission system measuring station equipment, and the explanation which I have given with reference to the transmission system measuring station structures, is also applicable to transmission system measuring station equipment.
- Q. Now we come to page 21, to the transmission line equipment, Mr. Freese.

Mr. Griffith: Did he explain where he got those figures?

Q. Which figures?

Mr. Griffith: The figures on page 18, for example—are they taken from the company's Exhibit?

- Q. Where did you get those figures, Mr. Freese; where did they come from, as shown on pages 18, 19 and 20, where you have detailed, by systems, the various items?
- A. For transmission system measuring station equipment we have accepted the figures as shown in the company's Exhibit 28.
- Q. For instance, on page 18, for the A system, where you show A, Iowa Park, Road No. 1, transmission system measuring station equipment, in the amount of \$491.97. Where did that figure come from?
- A. That came from the Company's Exhibit 28, and each one of the figures shown on the pages 18, 19 and 20 is reflected by the Company's Exhibit 28.

[fol. 2828] Q. On page 21 where you show transmission line equipment, and continuing through pages 21, 22 and 23, what is shown?

A. On the A system, for example, this item is broken down in to transmission line equipment, exclusive of excavation, amount of \$3,255,171.87. Machine excavation, 347,016.5 cubic yards at 37½ cents per cubic yard, \$130,131.19; hand excavation 1,343.2 cubic yards at \$1.31 per cubic yard or \$1,759.59; rock excavation 28,518.8 cubic yards at \$3.50 per cubic yard or \$100,165.80 for rock excavation. The total for the whole system being \$3,487,228.45.

Now, the figure of \$3,255,171.87 for the transmission line equipment exclusive of excavation was arrived at by taking the cost as shown in the company's exhibit 28 and deducting from that the excavation costs used by the company on this line, or rather I should say deducting the excavation cost on this line as shown by the company. We have also de-

ducted 15.7 cents per ton from the hauling costs.

On Line A, the transmission system equipment in Texas as reflected by the Company's Exhibit 28 amounted to \$3,567,591.90 and the excavation on that line amounted to \$307,652.68 according to the cost used by the company. The hauling deduction of 15.7 cents per ton on the 30,365.3 tons used on Line A amounted to \$4,767.35, and deducting the excavation costs used by the company, plus this deduction of 15.7 cents per ton on hauling of pipe, or \$4,767.35, we arrived at the figure of \$3,255,171.87 as being my cost, exclusive of excavation.

[fol. 2829] Now the 15.7 cents per ton hauling cost is the addition made by the company to the costs as derived from a study of the actual costs incurred by the company for contingencies which they expected or anticipated would take place in a reproduction cost new. First, ten cents for unloading in stock piles, and second 5.7 cents for moving gangs from one place to another. These costs were not incurred on the very sizable amount of work studied by the company in arriving at their costs. I see no reason why they should be incurred in a reasonable reproduction cost new program.

[fol. 2830] Now, we did not deduct ten per cent contingency allowed by the company on the actual hauling costs. These costs were that part of the total costs made by simply unloading the pipe from the cars into the trucks. The excavation costs which we have arrived at are costs which we

think are fair, or which I think are fair, based upon the information given us by Messrs. Dobson and Robinson, who have appeared as witnesses in this case. During the last few days we have taken bids on a water and sewerage system for the city of Bridgeport, Texas. These bids were received on June 14, 1934. The bid of the contractor whom we recommended for the award of that work was \$2.25 for solid rock excavation and 75¢ for loose rock excavation. The contractor's bid on this work covered 5965 vards. Incidentally, Bridgeport is served by the "B" System. The amount of rock estimated for this system was determined by borings, and we found there that of the 5965 yards of rock excavation estimated, 4115 yards would be classified as loose rock and 850 yards would be classified as solid rock. taking the \$2.25 unit price rather than the 75¢ unit price. Now, by the method of determining the classification of rock used by the company-that is, sticking down these bars as far as they go—it is my opinion that all of this work would have been classified under that method as solid rock, whereas, we found a large part of it is loose rock and can be excavated without the use of blasting. Now, these figures of 75¢ for loose rock and \$2.25 are in addition to what [fol. 2831] the contractor would receive for his earth excavation; in other words, they should be increased by approximately 50¢ per cubic yard to \$2.75 per cubic yard for solid rock and \$1.25 for loose rock.

The Court: Is that earth above rock?

A. No; that is by reason of the way we pay them. We pay them so much per linear foot for the complete job of laying the water line or the sewer line, and then if they strike rock we pay then in addition to that his unit price for the rock so that he will have been compensated in addition to this amount of earth excavation cost the figure for straight earth excavation. Now in connection with Transmission Line Equipment, which amounts to \$27,052,546.81 for the Texas lines the excavation costs which we have used are excavation costs as of the date of our appraisal, which is June 15, 1934. For the rest of the costs we have adopted the company's figures as shown in their Exhibit 28, that appraisal being dated as of January 1, 1933. Now, the price of pipe on the system as a whole had, according to the company's Exhibit No. 40, increased on May 1, 1934, in the amount of \$1,105,652.54. Since that time it has decreased that is, the quoted price has decreased \$309,693.44. Con-

struction costs, according to the company's witnesses and according to the company's Exhibit 40, have increased \$352,574.45. That includes the estimated increase in cost of excavation also. Taking into consideration welding and pressure couplings, the net increase over and above Janu-[fol. 2832] ary 1, 1933, was \$1,269,688.28. We have used the 1933, January first, figure, as introduced by the company as of to-day for the following reasons; In the first place the company has included contingencies and omissions in the approximate amount of one million dollars. Practically all of their studies were based upon actual construction costs, in which case any omissions and contingencies were taken into consideration. One of the biggest items in omissions and contingencies is the two and a half per cent. on main lines, which amounts to \$797,360.98. Now, the length of these main lines according to a test check of some two million feet which we made—that is, the measured length—is shown in the appraisal as almost identical with the actual amount of pipe purchased, so there could not be any omissions and contingencies on the pipe item itself. 'Now, if we were estimating the estimated costs of a piece of construction—for example, when we estimated the cost of the Eagle Mountain and Bridgeport dams at a cost of some six and a half million dollars, we estimated contingencies of approximately 5 per cent. and those contingencies were actually incurred, but the day after that construction work has been actually accomplished and we go back and analyze our actual construction records, we could tell exactly what the reproduction costs of those two dams should be without having to make any allowance for omissions and contingencies. Now, with reference to the [fol. 2833] pipe the company in the purchase of a good many millions of dollars worth of pipe has always been able, so far as our investigation goes, to obtain a discount of from 10 to 15 per cent. off of the quoted price. I am of the opinion that that would be so to-day on any large purchase The last large purchase of pipe made by the company was for the 21 inch O. D. 71.25 pound pipe, to which reference has already been made. The actual price paid for this pipe was \$2.00, whereas the quotation as of the date of this appraisal, which was just a few weeks before the pipe was actually purchased, was \$3.00; in other words, the money actually paid for this pipe, which is the only large purchase in 1933, was approximately 331/3 per cent less than the quoted price.

Q. The prices you just gave are the prices per foot?

A. The prices per foot. We also investigated the price of some two million dollars worth of pipe bought in 1929, 1930, and 1931, and for each and every one of those purchases the price ran from 10 to 15 per cent, less than the quoted price used in this exhibit, or rather the quoted price has been used in Exhibit 28 and it has been accepted by us. For these reasons we feel that the prices used by the company, except for excavation, would be fair and reasonable as of to-day. There is one other item or one other line on which we made a small correction other than the changes in the prices of hauling and of excavation. That was on the "K" System Line "K"-5. On this System the com-[fol. 2834] pany used for some \$91,913.00 of plain end seamless casing the quoted price for 6\% inch seamless casing, threaded and coupled, at \$1.2286. Instead of that, we have used the price for 6% inch seamless plain end pipe of \$.8718, a saving of \$.3568 on 71,913 feet of pipe on Line "K"-5. This amounts to \$25,658.56. The only reason why the company should use seamless casing on a job of this sort would be because they could make a saving on the price of that pipe. Now, the price actually paid for pipe during a time when prices were higher than they are now—that was in 1929—was 64¢ per foot as compared with 87¢, which we have used, and the \$1.22 price which the company put in their Exhibit 28. I believe, Mr. Fitzhugh, that completes the explanation of Transmission Line Equipment.

[fel. 2835] Q. Now, passing to the next classification of property, we come to Compressing System Property, page 24. What do you show on that page?

A. We show on page 24 the reproduction cost new for each of the compressing stations located in Texas, the total amount being \$4,146,111.57. That is carried forward to the summary sheet. For this compressing station property, in the amounts shown for each of the compressing stations, we have accepted the figures as shown in Exhibit 28.

Q. The next item is General Office Land, on page 25. Will you explain your total arrived at on page 25?

A. The General Office Land cost, as shown by exhibit 28,

is \$44,345.00—I believe it is \$545.00. We have allocated to the Texas properties 86 per cent of this cost, and to the [fol. 2836] Oklahoma properties, or to the properties excluded from this appraisal, 14 per cent.

Q. How did you find the percentage 86 per cent to use

as an allocation percentage for the Texas properties?

A. The 86 per cent was arrived at by taking the ratio of the Production System Property as evaluated in Exhibit 28, the Gathering System Property, the Transmission System Property, Compressing System Property, and Telephone System Property, segregating to Texas, on the basis heretofore explained, the properties applicable to Texas, and taking that total as compared to the total cost in both States of the properties which could be definitely allocated as between the two States, 86 per cent is found to be in Texas and 14 per cent in Oklahoma; and we have therefore allocated the General Office Land on this same basis. This compares to the 85 and 15 per cent figure which has been found in most of the accounting exhibits—that is, 85 per cent chargeable to Texas and fifteen per cent chargeable to Oklahoma.

Q. What do you show on page 26?

A. 26 shows Other General Land. The cost of this land as shown by Exhibit 28 is \$49,273.87. We have allocated to the Texas properties 86 per cent, or \$42,375.53.

[fol. 2837] Q. On page 27 you show the General Office Structure.

A. Yes, and we have allocated to Texas \$276,436.36, that being 86 per cent of the cost of \$321,437.63, as shown in Exhibit 28.

Q. The next is Other General Structure, shown on page 28.

A. This has also been allocated on the basis of 86 per cent to Texas and 14 per cent to Oklahoma, the net result being an allocation to Texas of \$40,239.02.

Q. Now, on the General Office Furniture and Fixtures shown on page 29, and Other General Furniture and Fixtures shown on page 30, and General Shop Equipment shown on page 31, and General Tools shown on page 32,—in all instances you have used an allocation percentage to Texas properties of 86 per cent, have you not?

A. That is correct.

Q. And the same sort of explanation is made as to the use of that per cent?

A. Yes.

Q. What do you show on page 33?

A. On page 33 we show Automotive and Construction Equipment. Now, for Automotive and Construction Equipment we have taken the net worth as shown in the Company's Exhibit 10, on the last page,—this being the net book cost as [fol. 2838] of April 30, 1934, and amounts to \$84,547.82. Of that we have allocated 86 per cent to Texas and 14 per cent to Oklahoma. The reason we took the book value for this item of property, rather than the book cost is by reason of the way the Company treats the depreciation on this property. The way they handle the use of this equipment on the books of the Company, if an automobile is used by any particular department of the Company, or any particular operation, they charge out to that operation the cost of the-or rather they made a charge for the use of the automobile, which is charged in to the operating expenses or in to the new construction, as the case may be, at that cost, and the depreciation included in that charge is credited to this account. Any other policy of evaluating this equipment would result in burdening the operating expenses, on the one hand, to the benefit of this charge, or, on the other hand, burdening this cost at the-or to the benefit of the operating expenses.

Q. On pages 34, 35, and 36, you show the detail on your amounts for the General Telephone System. Will you ex-

plain those, please?

A. On these pages are listed each one of the telephone lines owned by the Company. We have charged against [fol. 2839] Texas the telephone lines actually located in Texas, and against Oklahoma the telephone lines located in Oklahoma, except in the case of the line along H and the line along G, which case we have charged the lines north of Gainesville and Petrolia to the Oklahoma properties.

Q. Now, refer-

Mr. Griffith: May I ask a question, Mr. Fitzhugh?

Mr. Fitzhugh: Yes, sir.

Mr. Griffith: As I understand it, in connection with the telephone systems on Line G and Lines H and Second H you did exactly that which you did in connection with the pipe lines?

The Witness: That is correct.

Mr. Griffith: That is, you charged, or you did not include in your Texas property the telephone lines running from Gainesville north to the Red River, nor did you include in the Texas property the telephone line running from the Petrolia Station north to the Red River, along Line H?

A. That is correct. We considered those as purely applicable to the transportation of the gas from or to Oklahoma. However, I should also state that we did not allocate [fol. 2840] any of the properties in Texas, even though they may have been concerned to some extent with the transportation of Oklahoma gas.

## By Mr. Fitzhugh:

<sup>6</sup>Q. Now, referring back to your summary sheets, pages 1 and 2, you have completed, have you not, an explanation of all the items appearing in your reproduction cost new, up to the non-physical properties?

A. That is correct.

Q. The first of those, Administration and Legal Expenses During Construction is shown on page 37, is it not?

A. That is correct.

Q. Will you explain how you found the Administration and Legal Expenses During Construction. Incidentally, you have included on this page the Engineering and Supervision and Taxes During Construction, have you not?

A. That is correct. We have applied to the items on which Administration and Legal Expenses During Construction would be incurred two per cent, the total of these items being \$34,393,713.13, or a total for Administration and Legal Expenses During Construction of \$687,874.26,-the two per cent being the same charge as has been set up on the books of the Company during the past several years for this [fol. 2841] item of cost. Now, for Engineering and Supervision During Construction we have allowed five per cent, on \$34,117,276.77, this being the sum-total of the items to which engineering and supervision costs are applicable,-the only difference between the thirty-four million, one hundred and seventeen thousand dollar figure to which the Engineering and Supervision percentage was applied and the thirty-four million, three hundred and seventy-three thousand dollar figure to which the Administration and Legal Expense charge was applied, being the General Office Structure in the amount of \$276,436.36; that figure of two hundred and seventy-six thousand dollars includes the architect's services on that building, which we consider as being equivalent to

the engineer's services on the other parts of the System. This five per cent for Engineering and Supervision is sufficient to provide a complete engineering and supervision service, including the drawing of the final-as-built plans of the System. Now, during the year 1927 the Company actually constructed some \$6,600,000.00 worth of property. The administration and legal and the engineering and supervision actually capitalized by the Company on its books amounted to .43 per cent, or slightly less than a half per cent, [fol. 2842] as compared with the 7 per cent figure which I have used. During the year 1928 there was accomplished some \$3,600,000.00 worth of work by the Company; the general overheads capitalized—that is administration and legal and engineering and general supervision, were \$35,958.69, or 1.00 per cent, compared to the 7 per cent which we have During 1929 approximately \$7,000,000.00 worth of work was accomplished and the general overheads capitalized amounted to \$59,912.56, or .86 per cent. However, in addition to these general overheads capitalized, the Company made certain direct charges to the work. I have been able to analyze some \$4,260,000.00 worth of this work accomplished during 1929 and 1930, and the direct chargesthat is, the engineering and office payroll charged direct to this work, amounted to .77 per cent. Taking the cost capitalized on the books as administration, legal, engineering and general supervision, plus the direct charges made to the work, we get a weighted average for the three years of 1.49 per cent, being 1.20 per cent for 1927, for the \$6,600,000.00 worth of work; 1.17 per cent for 1928 for the \$3,600,000.00 worth of work; and 1.63 for the \$7,000,000.00 worth of work done in 1929. Now, I have gone through and assumed that [fol. 2843] for the year 1927 one-half of the General Administration and Legal salaries and expenses, insurance, telephone and telegraph; Engineering and Geological Department salaries and expenses; and Office Building expenses, that half of those expenses, in the amount of \$386,002.08, might have been capitalized on the books of the Company or charged against this \$6,600,000.00 worth of construction at that amount, or 3.14 per cent, and the amount actually charged direct or capitalized on the books, gives me a total of 3.91 per cent for the year 1927, for the \$6,600,000.00 worth of work. This 3.91 per cent compares with the 7 per cent which I have allowed for Total Administration and Legal,

Engineering and General Supervisions Costs in this appraisal. For the year 1928 there was only \$3,600,000.00 worth of work done. I have assumed that one-third of the General Administration and Legal Salaries and Expenses, Insurance, Telephone and Telegraph, Engineering and Geological Department Salaries and Expenses, Office Building Expenses, which were charged during those years to operating expenses for operating the System's properties, might conceivably have been charged against this construction work.

[fol. 2844] That results in 4.27 per cent, which added to the actual charges of 1.17 per cent, gives a total of 5.04 per cent, as compared to the 7 per cent that I have used. For the year 1929, when construction went back to seven million dollars, I have allocated a possible one-half of all the operating expenses, the operating expenses being \$494,-664.96; that is, these general operating expenses, and amounting to 3.96 per cent, which added to the actual charges, gave 4.73 per cent. The weighted average for the \$17,200,000 worth of work was 4.48 per cent, 1.49 per cent being the actual amount charged on the books, and the 3.71 per cent being the amount which might conceivably have been charged of the operating expenses, giving a total of 4.48 per cent of the \$17,200,000 worth of work, which compares to the 7 per cent which I have used for these two items of overhead.

Q. You have not made your explanation of Taxes During Construction yet, have you?

A. In arriving at my estimate of Taxes During Construction, I have segregated the property in different divisions, depending upon the estimated construction period. We have based our estimate of Interest During Construction on an interest rate of 6 per cent. For example, take the division of property into which we have put Gathering System Rights of Way, Transmission Measuring Station Land, Transmission Measuring Station Leaseholds, Other Transmission System Land, Other Transmission System Lease[fol. 2845] holds, Transmission System Rights of Way, and Other General Land, totaling \$1,063,886.91, we have applied 6 per cent. Now, this 6 per cent was arrived at by assuming that the money would be provided three months ahead of the beginning of construction, and that—perhaps, I should explain it this way—

Mr. Griffith: Just a moment. Did you ask him for Taxes During Construction?

Mr. Fitzhugh: Yes.

Mr. Griffith: You are explaining Interest During Construction.

Q. Take Taxes During Construction.

Mr. Griffith: Pardon my interruption.

A. Will it be all right to finish the explanation of this Interest During Construction?

Q. Go ahead with the Interest During Construction since

you have started on it.

A. All right. Well, we have taken what we estimate to be the probably construction period for each one of these items of property, and have assumed that the money would be used uniformly during the progress of the work, and that the money would be provided three months ahead of the actual need of the money, and based upon a six per cent interest rate we arrive at the percentages allowed for each item. Now, to get back to Taxes During Construction, for which we have allowed \$8,500.

Q. That is shown on page 37?

[fol. 2846] A. Yes. Very little, if any, taxes during construction have actually been paid by the Company, nor would they be paid by the Company in a reasonable reconstruction new program. It is the policy of very few of the taxing districts to tax any work in progress of construction. Furthermore, most of this work would be done during the summer working months.

Q. I will ask you, Mr. Freese, if you are yourself a mem-

ber of a taxing body of this state?

A. I am a member of the Fort Worth School Board, which includes the Fort Worth Division of the Lone Star Gas Company—

Q. Is there quite a substantial portion of the Company's property, in addition to the Fort Worth Division, within the

school district of which you speak?

A. Yes; there are several millions of dollars worth of the Fort Worth Division property, and also some of the general property of the Lone Star Gas Company.

Q. What is the general policy of taxing property under

construction but not completed as of the taxing date in that school district?

Mr. Griffith: We will object to that as being irrelevant and incompetent, and not having any bearing upon this case.

The Court: Yes; I think that is as far as you better go.

[fol. 2847] Q. Complete your explanation of this item.

A. We asked the auditors to make as complete a search as possible for a record of any taxes paid during construction. During the years 1927, 1928, and 1929, during which period something like \$17,200,000 worth of work was accomplished, they were able to find taxes, which might have been taxes during construction, in the amount of \$1,616.73. Now, this \$17,200,000 being somewhat more than a third of the property, we multiplied that by three and then doubled that figure approximately to get the \$8,500 we have allowed. In other words, we have allowed a factor of safety of two to one.

Q. Now, in connection with this item and others where you have mentioned the figures actually shown on the Company's books, Mr. Freese, I will ask you what was your source of information?

A. Those figures were furnished us by J. A. Phillips Com-

pany.

Q. And the investigation was made at your request and under your general supervisory direction?

A. That is correct.

Q. Now, pass on to Preliminary and Organization Expenses, shown on page 39. Will you explain the items ap-

pearing on this page?

[fol. 2848] A. The items Preliminary Geological Investigations, \$114,444.00; Preliminary Engineering Investigations, \$49,695.00; Attorney's Fees, \$15,000.00; Charter and Qualification Fees, \$10,000.00; Franchise Tax, \$17,144.00; Corporation License Tax, \$3,273.00; and Engraving Common Stock Certificates, \$136.00, were taken from the Company's Exhibit 28; all of the items except Franchise Tax and Corporation License Tax being included under the heading of Preliminary and Organization Expenses. Franchise Tax and Corporation License Tax, in the amounts given, were included under the head of Taxes During Con-

struction. Now, we have allocated to Texas 86 per cent of the total for those items.

Q. And you have already explained how you obtained the 86 per cent allocation factor?

A. That is correct.

Q. On page 40 is shown the detail on Working Capital.

Will you explain these computations?

A. Yes, sir. Most of those figures were arrived at in consultation with the auditors. Materials and Supplies amounting to \$416,000.00; Cash Working Capital, consisting of bank balances in the amount of \$300,000, which I believe was also the figure used by the Company, we have allocated 86 per cent to Texas, or \$258,000.00; 45 days' Operating Expenses, \$200,000.00; Advances on Gas Purchase Contracts, \$360,000.00; Prepaid Insurance and Rentals, \$32,000 for the entire system, and 86 per cent for Texas [fol. 2849] is \$27,500.00; Gas in System, 150,000,000 cubic feet at \$.06, giving \$9,000; and Petrolia Field Line Equipment Salvage Value, at ten per cent of that line's cost, or \$18,500; giving a total of \$1,289,000.00. All of these items are carried forward to the Summary as shown on pages 1 and 2, and which totals \$40,256,862.39.

Q. And that does represent, in your opinion, does it not, Mr. Freese, the present value of these properties?

A. Of the Texas Gathering, Transmission, Compressing,

and General System properties.

Q. Now then, I notice in your non-physical properties, and in fact, nowhere in your summary is there a separate allowance for going concern value, or going value. Does that mean, Mr. Freese, that you have not evaluated this portion of the Company's property as a going concern?

A. No; that does not mean that we have not taken this at its reproduction cost new as a going concern, rather than

its junk value as a going concern.

Q. Why have you felt justified in not making some sort

of additional and separate allowance for going value?

A. In the first place, the history of the Company indicates that no losses on idle plant were actually incurred; or, if any such losses were incurred during the early years of the Company, that they have been easily made up in the meantime. In the second place, during the operating [fol. 2850] periods considered in the auditor's exhibits, most of the items which are ordinarily considered as contributing

to the building up of going value have been charged to

operating expenses.

Q. In your theory in reconstructing the Company's property and using that reconstruction cost as a measure of its present value, did you make any assumptions such as Mr. Connor made in assuming that various cities and towns were operating artificial gas plants?

A. No; it was not necessary to make any such assump-

tion under the methods I used.

Q. From your knowledge of the history of the Company, Mr. Freese, I will ask you if it would be reasonable to suppose that numbers of towns, instead of reluctantly attaching to the system, actually came on the system, willing and anxious and ready to pay a good price for gas as soon as it could be furnished to them?

Mr. Griffith: We will object to that unless the witness says he actually knows.

[fol. 2851] Q. Do you know those historical facts, Mr. Freese?

A. Not covering the system as a whole. I know for individual towns where I happened to observe it, that the customers were very largely attached—that is, where they have built the gas systems in late years. In fact, most of them were signed up ahead of the building of the gas system into the towns.

Mr. Griffith: I will ask you, Mr. Freese, to specify the

particular towns.

A. Well, there is one town, and I am not sure whether it is on the Lone Star system, but I happened to be doing some work when the gas system was laid, Comanche. Royse City is another town. Those were some of the towns I happened to know about.

Mr. Griffith: Is Comanche on the Lone Star system?

A. No, it is not.

Q. It is a common practice, though, of the companies when they are about to build into a town, to sign up prospective customers before they ever agree to put the system in; isn't that a fact?

A. Yes, I know at Lubbock for instance, where we have been preparing estimates for purposes of securing a loan from the Government, we signed up, or have already signed up the prospective customers in advance. Mr. Griffith: Lubbock is not on the Lone Star system, is it Mr. Freese?

A. No, it is not on the Lone Star system.

Q. Royse City is a part of the Lone Star system, is it not? [fol. 2852] A. It is a small system on the Lone Star system.

Q. Now, you have included in your appraisal all the direct structural costs which include the cost of installing by units the physical property of the company, and you have included in those costs as part of the unit costs, all the job overheads, have you not?

A. That is correct.

- Q. In addition to all those expenses and costs, you have included in your non-physical properties: administrative and legal expenses during construction, engineering and supervision during construction, taxes during construction, interest during construction, preliminary and organization expense, and working capital, in a total amount of \$5,407,711.99?
- A. Yes, or exclusive of working capital, in the amount of approximately \$4,120,000.00.

Q. Does the company operate in competition with any other pipe line company in the territory it serves?

A. I started to say at Waxahachie they did, but they supply both the sister company and the independent company there. At Wichita Falls, I believe another company serves certain industrial consumers. At Dallas and Fort Worth there is another company which serves the power companies located at those two cities. Now, there may be some other cases of which I do not know, but so far as I know those are the only instances.

Q. Looking at the business as a whole, would it be safe to say as a general proposition that the company in the territory which it serves in supplying gas at the various cities [fol. 2853] and towns at the city gates which it serves, operates practically without competition?

A. With the minor exceptions which I have noted, that is true with reference to Texas. I am not so sure with reference to some of the Oklahoma towns. Perhaps at Guthrie

there may be some competition too.

Q. We do have some more questions that we would like to ask Mr. Freese in connection with a different matter, but we would like to turn him over on cross examination at this time as to the matters about which he has already testified.

#### Cross-examination.

## Questions by Mr. Griffith:

Q. How old are you, Mr. Freese?

A. Thirty-three years old.

Q. 33 years old?

A. Yes.

Q. And I believe you graduated from the Massachusetts Institute of Technology in 1921?

[fol. 2854] A. That is correct.

Q. So you are twelve years out of college?

- A. That is approximately correct—twelve or thirteen.
- Q. Now, in practically all of that twelve years time, you have resided in the City of Fort Worth?

A. Yes, that has been my home, and my office.

Q. And for most of that time, you have been identified with your present engineering firm?

A. During all that time.

Q. Is your engineering firm of Hawley, Freese & Nichols known as natural gas engineers?

A. No, we are known as consulting engineers.

Q. As a matter of fact, you are known as municipal engineers, are you not?

A. Yes, we are known as municipal engineers.

Q. And if you have any specialty, it is in the field of municipal engineering, in the construction of water and sewage plants?

A. We have done more water and sewage plant work than

any other line of construction.

Q. Well, you previously testified that you have never had any natural gas plant experience?

A. That is correct.

[fol. 2855] Q. Has Mr. Marvin Nichols, your associate, ever had any natural gas construction experience?

A. If any it has been very small.

Q. It has been negligible?

A. Yes.

Q. Is the same thing true of Major John B. Hawley, the senior partner of your firm?

A. So far as I know. He has probably done some, from

time to time, but it has been a very small amount, and a long time ago.

Q. Well, Major Hawley hasn't had anything to do with

this Lone Star case, has he?

A. No-

Q. You and Mr. Nichols have conducted this Lone Star Gas Company case, haven't you?

A. Yes; we have advised with Major Hawley from time

to time on this work.

Q. Well, Major Hawley has been in Europe during this time, has he not?

A. Well, about half of the time.

Q. And if you wanted to consult with him, did you wire him, or cable him or write to him, or how?

A. We got in communication with him.

Q. Now, you testified you had never had any experience in the operation of a natural gas plant or property?

A. That is correct.

Q. In the City of Fort Worth are there many men and [fol. 2856] many concerns engaged in the natural gas business and the oil business?

A. There are a great many in the oil business, and per-

haps a few in the gas business.

Q. Well, has any man in the City of Fort Worth, who has ever had so much as a dime invested in the natural gas business, ever called upon you for engineering services in connection with the design, construction or operation of a natural gas plant or property?

A. Well, we have advised with some of them. For example, with reference to this Lubbock work, the T. P. Coal & Oil Company is to furnish the gas, and we have advised with

them in that matter.

Q. Well, have you ever been called upon to supervise the construction or to actually construct any natural gas plant or property of any kind or character?

## [fol. 2857] A. You mean the actual construction?

- Q. Yes.
- A. No.
- Q. You never have?

A. No, sir.

Q. Didn't you testify before the Railroad Commission

of Texas that so far as the installation of any property was concerned which partook of the nature of the Lone Star Gas Company's public service property, that your total experience would not cover more than \$3,500.00 worth of construction work?

A. I think that is probably true.

Q. Now, I want you to refer to Plaintiff's Exhibit 6, being your alleged valuation of the Texas property of the Lone Star Gas Company in relation to the public service, and I want you to point out a single page to me in that appraisal where you have exercised your independent judgment as an engineer in arriving at the over-all costs of any unit of property—and I refer to physical property.

A. You do not mean as it is made up of the different

parts, but of the total for any particular item?

Q. That is correct.

A. No sir. We have been able to accept for a large part of the properties, the values set out in Exhibit 28. However, the segregation in each case has been our own segregation.

Q. But there is not a single item of the physical prop-[fol. 2858] erty appearing in Plaintiff's Exhibit 6, which represents—in so far as the physical property is concerned—which represents your own independent judgment as an engineer in this case?

A. Parts of the transmission line equipment, particularly, do.

Q. All right; let's turn over to transmission line equipment. That starts at page 21, does it not?

A. That is correct.

Q. Now, of what kind of pipe is the A system of the company constructed?

A. It is constructed of steel pipe.

Q. What kind of steel pipe?

A. Lap weld, plain end.

Q. Is it all lap weld, plain end.

A. That is my memory at the present time; it, is alternate dresser coupled and welded joints.

Q. Alternate dresser coupled and welded joints. Well,

did you ever have any experience with welding?

A. Not of natural gas transmission systems. We have had incidental welding at various times, involved on our work.

Q. Have you ever personally done any welding work?

A. No.

Q. Have you ever supervised the doing of any sizable

welding construction job?

A. From time to time we have had welding work to be done, which it was necessary for us to inspect and pass upon; small amounts from time to time on almost every job.

[fol. 2859] Q. That has been a relatively small amount,

has it not?

A. Comparatively speaking, yes.

Q. Now, how do you know that the welding costs as adopted by Mr. Biddison and included in Defendant's Exhibit 28, were correct?

A. Because in the hearing before the Railroad Commission we checked very carefully the basis of all of the figures, and which are now being used by the company in this exhibit.

Q. From your own personal knowledge, or as a result of any construction experience of your own, how do you know that the welding costs used by Mr. Biddison in Defendant's Exhibit 28 are correct?

A. It is only from our check of the actual costs incurred

by the company.

Q. And outside of that, you have no other factual data upon which to predicate your acceptance of Mr. Biddison's figures, have you?

A. No sir, but for example—on a great many of the lines, built in 1929, 1930 and 1931, we had detailed breakdowns

of all the costs.

Q. Who made those detailed breakdowns—Did Mr. J. A. Phillips make them?

A. He furnished us with the actual costs as shown by the company's books, and we made our own analysis and break-

down of those costs.

Q. You did not make the analysis from the books of the company or make any actual cost studies based upon the [fol. 2860] costs as shown by the company's books yourself, did you?

A. I made all the cost analyses that were made. I was simply furnished with the data and the actual costs from the company's books and records, but the analysis of those

construction costs was made by myself.

Q. You did not actually inspect the books, records or accounts of the company for the making of that determination?

A. No, all those figures were furnished to me at my re-

quest.

Q. How do you know that the cost of laying and testing the alternate dresser coupled and welded pipe on the 18 inch line A system of the Company, as used by Mr. Biddi-

son in Defendant's Exhibit 28, were correct?

A. Well, by reason of knowing the methods used by Mr. Biddison. He took most of his costs, except for the laying of dresser coupled pipe (in which case he worked up a hypothetical gang) but they were based on costs as shown by the books of the company, and we were furnished with those costs in the hearing before the Railroad Commission, and we also had our auditors dig up the costs on a great many of these lines in those respects.

Q. All right now, outside of the information that has been furnished to you by the company, or information which you have obtained through Mr. Phillips from the books of the company, what has been -our own experience in connection with those costs? Have you had any experience?

A. Not in the laying of natural gas pipe lines, no sir.

[fol. 2861] Q. You have had no such experience?

A. We have laid lots of other kinds of lines, and some steel lines, too, but not natural gas pipe lines.

Q. As a matter of fact, most of your experience has been in the nature of laying cast iron lines, has it not?

A. Yes, most of it.

[fol. 2862] Q. Mr. Freese, prior to December, 1931, you had never been employed by anybody in connection with any natural gas work?

A. No; however, I have been almost continuously on

that work since 1931.

Q. In December, 1931, you were hired by the Railroad Commission of Texas?

A. Yes, sir.

Q. But prior to that time you had never even made an appraisal of a natural gas property?

A. That is correct.

Q. Now, you say the pipe prices which are current as of this date and as reflected in Defendant's Exhibits, would be subject to a discount of ten to fifteen per cent, if this property were to be reproduced?

[fol. 2863] A. Yes, I said that the Company always had received, when they had a large amount of construction work, from ten to fifteen per cent discount off of the quoted price, but that in the last sizable purchase of pipe, according to our information, they got about thirty-three and one-third per cent off.

Q. When was that purchase, Mr. Freese?

A. That was in the first part of 1933.

Q. Was it prior to or subsequent to the adoption of the Steel Code?

A. It was prior to the adoption of the Steel Code.

Q. Now, do you know the circumstances attendant upon the purchase of the pipe that you refer to?

A. No, I only know that it was the only large purchase of pipe that was made during the year 1933 by the Company.

Q. Mr. Freese, can you refer me to a single instance where in the last eight months any pipe has been bought by Lone Star Gas Company, or any other gas pipe line company, below the quoted Steel Code prices?

Mr. Fitzhugh: Well, now, Your Honor, we object to that question, because the Steel Code does not set any par-[fol. 2864] ticular prices where any sizable purchase is made.

The Court: You may ask what the prices are and what the prices have been; but let's stay away from anybody's code.

Mr. Griffith: 'All right, sir.

Q. Can you cite me to a single instance in the last eight months where the Lone Star Gas Company, or any other large pipe line enterprise purchased pipe for less than the

quoted price for large lot purchases?

A. I do not know of a single large lot purchase. I do know that in making—that in securing quotations on pipe for a pipe line they told us that the quoted prices did not govern in that matter, and that they would have to take it up with the mill to secure the price for a particular pipe line.

Q. Have you made any inquiry, Mr. Freese, to ascertain what are the lowest quoted prices by any of the large manufacturers in the United States for steel pipe, and which prices are current as of this date?

A. Yes; the quoted prices as shown in the Company's

exhibits conform to the quoted prices as given us.

Q. And you are unable to point out to this jury a single purchase of pipe that has been made at less than the quoted [fol. 2865] prices of the manufacturers within the last eight months?

A. I don't know, particularly in this part of the country, of a single large lot purchase having been made in the last

eight months.

Q. Well, do you know of any small lot purchases that have been made below the quoted prices for small lot pipe?

A. No, I don't know of any carload or less than carload purchases that have been made at less than the quoted price.

Q. Within the last eight months period?

A. Within the last eight months period.

Q. Now, Mr. Freese, in your Exhibit 6 you adopt the Company's figures for the valuation of all structures shown in Defendant's Exhibit 28, do you not?

A. That is correct.

Q. What is the cost of lumber to-day, as compared with the January 1st, 1933, prices used in Defendant's Exhibit 28?

A. I do not know exactly; it has gone—the price has gone down ten per cent within the last few days. However, I should say that lumber, on the whole, is up from twenty-five to thirty per cent. However, the lumber part of this whole appraisal is a very small item.

[fol. 2866] Q. What about the price of brick as of Janu-

ary 1, 1933, and now ?

Q. Will you answer the question, Mr. Freese? [fol. 2867] A. Brick have gone up some. I think that on the Lone Star System, as a whole, possibly it amounts to about twenty-five hundred or three thousand dollars, mostly in the Dallas office building; but other things have gone down, to offset that.

Q. All right; what things have gone down as between January 1, 1933, and June 15, 1934, the date of your alleged

appraisal!

A. Well, dresser coupling—I mean threaded and coupled pipe, for example, has gone down considerably.

Q. All right, what other item?

A. Well, that is the main item I think of right now.

Q. Well, can you think of any other item? I want you to relate to the jury all of the items that have gone down from January 1, 1933, to June 15, 1934, the date as of which Plaintiffs' Exhibit 6 was prepared.

[fol. 2868] A. Well, threaded and coupled pipe was the principal item that I had in mind. Generally, the other items have gone up. Some of the valves have gone down in price.

Q. But the general trend of prices of materials entering into the reconstruction of the Company's property has been upward from January 1, 1933, has it not?

A. Not generally; a lot of things, for example, the compressors—our inquiry of the compressor manufacturer brought forth the information that prices were exactly the same to-day as they were on January 1, 1933. Next after pipe, that is probably the largest item in the system.

Q. Well, the largest item of property in the System, is plain end steel pipe, is it not?

A. That is correct.

Q. That amounts, in the entire System, to approximately \$20,000,000.00, does it not?

A. That is correct.

Q. And that is by far the largest item of physical prop-[fol. 2869] erty found in the System?

A. By far.

Q. And has the trend been upward or downward on the prices of steel pipe from January 1, 1933, to the present time?

A. Part of the time it has been up and part of the time it has been down.

Q. What is the over-all tread from January 1, 1933 to date?

A. It is upward, to a small extent.

Q. Now, as a matter of fact, Mr. Freese, in your Exhibit 6, dated June 15, 1934, you made no attempt to apply prices which were current as of that date, did you?

A. Yes, it is my judgment that the prices which we have applied and which we have used will take care of the current costs.

[fol. 2870] Q. Did you apply, in connection with your transmission system, your adopted evaluation cost of transmission system prices current on pipe as of June 15, 1934?

A. Mr. Griffith, I read into the record in detail just how much the pipe had gone up between January 1, 1933, and the date of our appraisal, and I also stated here I thought, [fol. 2871] that this—the over-all prices which we had used were sufficient to take care of that rise in price of steel pipe.

Q. Mr. Freese, you adopted the pipe prices taken from

Defendant's Exhibit 28, did you not?

A. No, I adopted the over-all cost taken from Exhibit 28.

Q. Exclusive of excavation costs?

A. Exclusive of excavation and hauling.

Q. Well, did you adopt the pipe prices which constituted a component part of the cost of the transmission system

which were set forth in Defendant's Exhibit 28?

A. No, I stated that the rise in pipe prices, in the first place, was offset by certain allowances for contingencies which had been made; and, in the second place, I thought if you were actually buying a large lot of pipe—an actual purchase for actual construction, that you could get prices off of the quoted prices.

Q. Well, let's turn to Transmission System Equipment— Transmission Line Equipment, as set forth commencing at page 21 of your Exhibit 6. Just tell the jury what prices you did use for pipe of the various sizes in the A System

in the compilation of your exhibit.

A. Well, the prices I used were the prices as of June 15, [fol. 2872] 1934. However, as I stated before, I thought there would be some discount from those prices on actual purchases.

Q. Didn't you testify on yesterday that the pipe prices you used were the quoted prices as of January 1, 1933?

A. No, sir, I didn't so testify. I testified that quoted prices on pipe had risen something like \$700,000.00, as I recall the figure, and that that figure was offset by certain allowances for contingencies which were made by the Company; that I had accepted the rise in pipe prices, but I had not accepted those contingencies; therefore, the prices which I have used are, in effect, the ones of June 15, 1934.

Q. Well, take the 18-inch pipe that is in the A System,—what price per lineal foot or per hundred lineal feet, at the mill, or f.o.b. the railroad siding, did you use in connection

with your appraisal-that is, Plaintiffs' Exhibit 6?

A. What size and weight did you ask for-18-inch?

Q. Yes, weighing 59 pounds plus per foot.

A. Well, the price, delivered, was—on June 11, 1934, was \$2.66 plus per foot, and the over-all cost which we have used was intended to take care of that cost.

[fol. 2873] Q. In other words, you used a price of \$2.66 per lineal foot for that pipe, delivered, f. o. b. the railroad siding, Oklahoma-Texas common points?

A. Texas common points.

Q. Texas common points?

A. Yes, sir.

- Q. Well, some of the pipe on Line A went into Oklahoma, did it not?
- A. Yes; well, the freight rate for that section across there is the same as it is to Texas common points.
- Q. Well, isn't that territory called Texas-Oklahoma common points?

A. Yes, I believe you are correct.

Q. All right. Now, you have got a price of \$2.66 per lineal foot for that pipe, delivered at the railroad siding. What cost did you apply for the hauling, in connection with that pipe, per lineal foot or per hundred lineal feet?

A. We accepted the price used by the Company for that hauling, except for the 15.7 cents per ton which the Company had set up for unloading into stock piles and for moving gangs, which costs were never actually incurred by the Company and would not be incurred in a reasonable estimate of the reproduction cost.

[fol. 2874] Q. Have you finished your answer?

A. Yes.

Q. Will you kindly tell me what cost you applied for hauling and stringing of that pipe?

A. Well, I don't have

Q. Based either on a basis per hundred lineal feet of pipe

or per lineal foot of pipe?

A. I don't have the exact cost used by the Company on that line, and which we accepted, but for the 15.7 cents. The Company did not use a uniform price for all lines; it all depended upon the average haul, and I don't have those figures in mind; they were not put into the record by the Company, but I assumed from the method used by the Company, that they were substantially correct. I think they were fair and reasonable, although they did include a ten

per cent contingency allowance or the actual hauling, which we did not eliminate.

Q. In truth and in fact, you don't know what the haulin and stringing amounted to, do you, Mr. Freese?

A. I don't have those exact figures, no.

Mr. Fitzhugh: You mean by lines?

Mr. Griffith: I am asking him about Line A.

[fol. 2875] Q. I want to know whether you know, Mr Freese, what cost per lineal foot, per hundred lineal fee or per ton, for the hauling and stringing of pipe you applied in connection with Line A?

A. No; I didn't break down the Company's detailed cost on that. I simply went into the method used by the Company and thought it was fair and reasonable and adopte that.

Q. As a matter of fact, you thought it was fair and ressonable except for the deduction you made?

A. That is correct.

Q. Now, if you did not know how the Company's cost were developed, how did you know your deduction was correct?

A. I did know how the Company's cost was developed.

Q. Well, what was the cost used by the Company in connection with Defendant's Exhibit 28, in connection with the hauling and stringing of this pipe?

A. We did not request the information with reference to each specific line. We did ask how the price was arrived at—the method used in arriving at the price. I might be

able to give you what the average price is.

Q. No; I want the price used in connection with Line on this 18-inch, 59-pounds per foot, pipe.

A. Well, the hauling costs per ton mile on that line wers. 1312 per ton mile.

Q. All right; what was the average haul?

A. I don't recall that figure. It was about eight or nin [fol. 2876] miles on Line A, as I remember our examination of the line.

Q. As a matter of fact, all you know about it is that you made a deduction of a certain amount from the Company hauling costs?

A. No; that is not all I know about it. I know I went in the Company's prices enough to know that at least we we

not being unreasonable when we accepted those prices. The price for loading on the wagons used by the Company was \$1.512 per ton, and that was the figure arrived at on the analysis of the actual hauling and stringing of some 19,000 tons of pipe.

Q. Are you able to tell the jury now, Mr. Freese, just what is allowed in your evaluation of the transmission line equipment in the "A" System for the hauling and stringing of the 18-inch pipe which weighs 59 pounds plus per lineal foot.

A. For the unloading from the cars into trucks we allowed \$1.355; for hauling we allowed \$.1312 per ton mile.

Q. And those figures which you have just related are obtained by deducting your deduction from the Company's

evaluated cost for hauling and stringing?

- A. No; the \$.1312, we left the ten per cent which the Company had arbitrarily added on to their actual cost in that. We deducted the 15.7 cents per ton where it was estimated that in a wholesale reproduction program you would have [fol. 2877] to unload it on the ground and then load it back on trucks, which costs were not incurred on the tonnage studied and which would not be incurred in a reasonable reproduction cost new.
- Q. You have set forth on page 21 of your Exhibit 6 the excavation costs for machine, hand, and rock excavation on line A?

A. Yes.

Q. It would include this 18-inch pipe which weighs around 59 pounds plus per lineal foot?

A. That is correct.

Q. Now, what costs for laying and testing that pipe did you use in connection with your evaluation of that equipment as it appears on page 21 of Exhibit 6?

A. We accepted the Company's cost as set out in the Company's Exhibit 28.

- Q. Well, what are the Company's costs as set out in Exhibit 28?
- A. I don't know those exact costs. The only thing I went into in detail on that was the method used by the Company in arriving at those costs.
  - Q. In your evaluation of that 18-inch pipe on the "A"

System, did you just adopt one hundred per cent the Company's laying and testing costs?

A. Yes; except for the 21/2 per cent addition for omissions

[fol. 2878] and contingencies which was made overall.

Q. But you are unable to relate to the jury just what was the figure that you adopted, either on a foot, per hundred feet, or total basis?

A. Yes; I can relate the general method used in arriving

at that cost.

Q. You mean you are unable to give the exact figure?

A. I cannot give the exact figure on Line A; I made no inquiry by lines.

Q. Can you give the exact figures on any line in the "B"

System?

A. No; we only asked with reference to certain particular lines. Those appear in the records, and I took those as being fair and reasonable.

Q. You include in your evaluation of Transmission Line Equipment the various systems commencing with "A" and ending with the T. P. U. System, on pages 21 to 23, inclusive, of Exhibit 6?

A. Yes.

Q. Is there a single pipe line in any one of these systems where you can give me a complete breakdown on a footage basis or per hundred lineal feet basis of the cost that you

have adopted and set forth in your appraisal?

A. No; I have not worked that out. I could take the information that was given us, and which I studied in determining whether or not those prices were reasonable, and I [fol. 2879] could work it out on these lines as to just what it was.

Q. But you never did work it out in connection with the

preparation of your Exhibit 6, did you?

A. No; I accepted the Company's costs as fair and reasonable. However, in checking the costs we wanted to inquire into, we had prepared the appraisal before, and we knew the trend of pipe prices, and that is the way we checked as to whether the prices were fair and reasonable or not.

Q. Will you refer to page 24 of the order and opinion of the Railroad Commission of Texas in Gas Utilities Docket No. 75? What machine excavation costs did you adopt in your appraisal as testified to before the Railroad Commission?

- A. Thirty cents. We had received an estimate by Mr. Robinson, of the McKenzie Construction Company, of 29 cents; from Mr. Lee of Kirkwood, Wharton and Lee, 28 cents; 30 cents from Mr. Sherman of the Sherman Iron Works at Oklahoma City; 21 cents from Mr. Dobson, who appeared here yesterday; 25 cents from Mr. Minter, formerly of Smith Brothers Construction Company; an average of 26½ cents; and I adopted a figure of 30 cents.
- Q. Your adopted figure was based in that case, as here, on information given you by contractors?
- A. All of our work is done by contractors; and that is the way we pay them, based on their bids; and that is the way we determined and estimated the cost of the work, based on what the contractors will actually do the work for. [fol. 2880] Q. Were the actual performance studies of the Company based on the ditching of nearly 500 miles of pipe line trench available to you at the time you adopted your figure of 30 cents for machine excavation, as testified to by you before the Railroad Commission?
- A. Certain information was made available to us. However, it was not in such shape as we could analyze it and make heads or tails of it. I think that is apparent in this particular case. When you analyze in the Panhandle Field, according to the Company's records you show a cost of rock and earth excavation of less than a dollar; in Oklahoma of around sixty or seventy cents on field lines; then when you analyze what is set forth in connection with machine excavation it runs up to over two dollars.
- Q. Compare that price of thirty cents which you used in your testimony before the Railroad Commission with the price which you set forth for machine excavation on page 21 of Plaintiffs' Exhibit 6.
  - A. Instead of 30 cents, we have used 371/2 cents.
- Q. Now, did the Railroad Commission in its order and opinion adopt your 30 cent figure for machine excavation?
  - A. I think so.
- Q. On hand excavation what figure did you use in your appraisal before the Commission?
- A. We used a dollar per cubic yard, Mr. Robinson having given us a figure of \$.70; Mr. Lee, \$1.00; Sherman, \$.60; [fol. 2881] Dobson, \$.985; Minter, \$.90; the average being \$.8375 per cubic yard, and we used \$1.00.

Q. Again, in the case of hand excavation you relied upon information furnished you by contractors?

A. That is correct.

Q. Now, what is the price per cubic yard for hand excavation which you used in connection with the transmission line equipment in your Exhibit 6?

A. \$1.31, which also happens to be the price used for lines

in excess of 200 feet by the Company.

Q. What price for rock excavation did you use in connection with your appraisal before the Railroad Commission of Texas in Gas Utilities Docket No. 75?

A. \$3.25 per cubic yard.

Q. What price do you use in connection with your exhibit 6 in this case as set forth on pages 21 to 23 thereof?

- A. In answer to the question as to what we arrived at for rock excavation in our testimony before the Railroad Commission of \$3.25, Mr. Robinson gave us a price of \$2.30; Mr. Lee of \$3.50; Mr. Sherman, \$3.00; Mr. Dobson, \$3.00; and Mr. Minter, \$3.37; or an average of \$3.035; and we used \$3.25.
- Q. And that price is to be contrasted with the price of \$3.50 which you apply on pages 21 to 23, inclusive, of Plaintiffs' Exhibit 6?

A. Yes.

[fol. 2882] Q. Now, the Railroad Commission of Texas adopted in their entirety your estimate for machine excavation, hand excavation, and rock excavation, did they not?

A. Yes; but they did not adopt the backfill costs.

Q. Coming to this matter of backfill costs, what backfill costs per cubic yard or per foot did you use in connection with your evaluation of the 18-inch pipe which is included in the "A" System on page 21 of your Exhibit 6?

A. We used the cost as used by the Company.

Q. What was that cost?

A. Fourteen cents plus.

Q. What was the cost for backfill on the 16-inch pipe which represents Line "B" in your "B" System?

A. It was the same thing.

Q. What was the cost for the backfill on the mainline in the "E" System?

[fol. 2883] A. It was the same thing, the Company having used the uniform cost for backfill on all systems.

Q. Did the Company use a uniform cost for backfill on all systems?

A. Except as between Texas and Oklahoma.

Q. And you adopted in toto that cost?

A. There is a slight difference in insurance rates as between Texas and Oklahoma.

Q. As a matter of fact, when you testified before the Railroad Commission of Texas you had adopted in connection with your appraisal as there presented a price of 10 cents per cubic yard, had you not?

A. That is correct.

Q. And that is shown at the top of page 24 of the Rail-

road Commission's opinion and order?

A. However, I might say that that ten cents which I had adopted was lower than the average of 12½ cents found by Robinson, Lee, Sherman, Dobson, and Minter; and that the Railroad Commission added to that 12½ per cent about the same leeway that they added to all of the other average costs found by those gentlemen.

Q. As a matter of fact, you have had no experience of your own as a contractor in the incurrence of excavation and backfill costs?

A. No; I have never been a contractor on excavation and backfill work.

[fol. 2884] Q. And everything that you have applied in connection with excavation and backfill costs in the preparation of Plaintiffs' Exhibit 6 was furnished to you, either by some contractor, or by some witness for the Lone Star Gas Company in this case?

A. With reference to excavation?

Q. Yes, sir.

A. Well, the prices which we have used are based upon the information given us by contractors.

Q. And on backfill the prices that you have used were the prices given to you by the Company's witnesses in this case?

A. Yes; however, we checked those by the contractors to see that they were reasonable; and in my opinion, they were reasonable. Now, I do know of my own knowledge

how these prices run from my observation of bids coming to us from time to time on our own work.

Q. Mr. Freese, are you able to produce here at this hearing any cost records or performance records on construction work in excavation and backfilling which would be similar in all essential respects to the excavation and backfill work which would be encountered in the reproduction of the transmission line equipment which you have evaluated in this case?

A. I can produce bids which we have received in the last few days at Bridgeport covering rock excavation. I can [fol. 2885] see no difference between the rock excavation for a sewer line and the rock excavation for a gas line.

Q. Now, Mr. Freese, I did not ask you about any bids. I asked you about any cost records or performance records in connection with work actually done. Can you produce any such records at this hearing?

A. So far as we are concerned, the cost is what we pay the contractors; that is the cost record; when we award a contractor a job and pay him so much, why that is the cost to us.

Q. Have you any cost or performance records recovering actual excavation and backfill work of a nature similar to that which would have to be done in the reproduction of the transmission line equipment of the Company, which you can produce here at this hearing?

A. I think I have answered your question, Mr. Griffith, that the cost as far as we are concerned is what we can get a contractor to do the work for.

[fol. 2886] Q. Is your answer "yes" or "no", Mr. Freese?

A. The answer is "yes", that I do have here records showing what is the actual cost to us for rock work at the place where we have latest taken bids.

Q. Based upon bids?

A. Yes.

Q. Mr. Freese, what kind of a gang would you use in laying and testing dresser coupled pipe?—just tell the jury in a general way how you would lay and test dresser

coupled pipe?

A. I don't know what sort of a hypothetical gang I would set up for that. If I should set up a gang of that sort I don't think the cost I would arrive at would be worth anything to me as compared with the actual costs incurred by the company or bids as to what a contractor would do the work for. If I estimated they would do two thousand feet in one day it would give me one price; if I estimated they would do three thousand, it would give me another price. If I should throw in another laborer or a couple of laborers, that would affect it. If I could use the actual performance records, I think it would be worth something.

Q. Mr. Freese, do you know as the result of any actual experience of your own the kind of a gang which is used in the laying and testing of dresser coupled pipe?—can you

answer that question "yes" or "no"?

[fol. 2887] The Witness: I answered, "no".

Q. Mr. Freese, what experience have you had in connec-

tion with the painting of steel pipe?

A. Why, only the painting of various sections of steel pipe running from six inches up to 72 inches, where it has been incurred on work on which we were designing and supervising and checking the work; that is largely in connection with air lines at disposal plants, running up to 72 inches.

Q. Were they relatively short lines?

A. Well, something like a million dollars' worth of lines were involved in this work at Chicago which we were planning, and quite a bit of that work was being done on other plants while we were there.

Q. Well, you haven't done that work at Chicago you were

planning, have you, Mr. Freese?

A. Yes, sir; there was work being done and in progress all the time.

Q. Well, it wasn't being done under your direction, was it?

A. We kept a general check on a job at San Antonio where 36-inch steel pipe was painted under our direction at the plant there.

Q. Well, what was the cost per lineal foot in the San Antonio job or the cost per hundred of the area for the [fol. 2888] painting of the steel pipe?

A. I don't know.

Q. Can you relate any actual costs as applied to one hundred lineal feet of pipe of any size or as applied to the

square foot of pipe surface, based upon your own experience?

A. No; the only information we would have of that nature would be coming from the books of the Lone Star Gas Company.

Q. Now, what cost for painting of pipe did you use in connection with your development of the costs of Transmis-

sion Line Equipment?

A. I don't have the exact figure, having accepted the company's figure on that. I can dig that out and let you know what it is.

Q. As a matter of fact, Mr. Freese, you have had no occasion to keep any cost or performance records in connection with the painting of large amounts of steel pipe?

A. No. However, we have had occasion in this investigation to investigate, costs actually incurred by Lone Star Gas Company.

Q. Mr. Freese, what kind of a gang is used in the laying

of threaded and coupled pipe?

A. I would not like to hazard a guess as to just what sort of a gang you would set up for any particular size or weight of pipe or for other conditions.

Q. As a matter of fact, you don't know, do you, Mr.

Freese?

A. Well, if I set up a gang, that would simply be an [fol. 2889] estimate—a hypothetical estimate. It would not be a matter of knowledge; it would be a matter of estimating out of my head what I thought would be required. It would be based on no actual experience of the company.

Q. Have you had any actual experience in the laying of threaded and coupled pipe in open country construction?

A. No. We have had considerable threaded and coupled

pipe laid on water lines in city streets.

Q. Well, how many men are necessary to be utilized in the economical laying of threaded and coupled pipe of any particular size?

A. I would not like to make a guess as to that.

Q. Well, what is the least number of men that can be used in a gang engaged in the laying of six-inch threaded and coupled pipe?

A. I am not willing to guess what that would be. It all

depends upon the circumstances.

Q. Do you know the personnel of the gang ordinarily

used in laying threaded and coupled pipe and what each man does in connection with that operation?

A. Yes, I think I have a general knowledge.

Q. All right. What do they call each of the men that engage in the operation of laying threaded and coupled pipe?

A. I don't know necessarily what you call them in the parlance of the natural gas industry, but I know what

they do.

Q. Well, what do they call them in the parlance of the [fol. 2890] oil industry or any other industry that uses

threaded and coupled pipe?

- A. Well, you have the men that carry the pipe to the side of the ditch; you have the men that prepare the joints and threads and couples, paint the threads and couples, the men that turn the pipe, the men that hammer the joints as the pipe is being turned. Just what you call those various men I don't know.
- Q. As a matter of fact you never had occasion to lay any threaded and coupled pipe or supervise the laying of it as a construction superintendent?

A. No, only as an engineer inspecting the work on water lines where we have used threaded and coupled pipe.

- Q. Well, now, you have related to the jury all you know about the laying of threaded and coupled pipe or screw pipe?
- A. Well, I will try to answer your particular questions the best I can.
- Q. Mr. Freese, what testing costs have you adopted in connection with the testing of pipe which is solid welded throughout?
- A. Mr. Griffith, except for excavation and hauling costs and the cost of pipe on that line "K"-5, we have adopted the costs in every particular as set forth by the company. As I stated before, I think the increase in pipe prices has been offset by certain other allowances, but for testing and all of the other items we have accepted the company's costs, which I think were certainly reasonable, in so far as the company is concerned.

[fol. 2891] Q. Mr. Freese, what would be your best estimate as an engineer of the cost of testing a 10-inch welded line on a mileage basis or footage basis or any other basis

that you care to use?

A. Mr. Griffith, we accepted the company's figure on that. I can dig that out. We studied the company's cost records and the methods used by the company in arriving at those costs. I think they are fair and would compare with the actual cost of any items in connection with this work. I can dig them out, and will be glad to.

Q. In the preparation of your Exhibit 6, had you had any experience which enabled you to determine reasonable costs for the testing of welded pipe lines on a mileage basis, a

footage basis, or per hundred lineal feet?

A. No, only my experience was in examining the costs as

actually incurred by Lone Star Gas Company:

Q. Now, what are included in these backfilling-costs, Mr. Freese, of the company which you adopted? Give us the breakdown on this 14 cents plus which you say the company used for backfilling costs on the 18-inch pipe in the "A" system, how much of it was labor, how much of it was for the use of equipment, how much for insurance, how much for superintendence and supervision.

A. I do not carry those figures in mind. I can dig them

out and give them to you.

Q. Do you have them here in your data?

[fol. 2892] A. Not right before me. I have them in my work papers, and they would be based upon the costs as

reflected by the company's own records.

Q. Mr. Freese, what natural gas pipe lines in the United States have been built under the supervision, or, rather, built under the specifications which were submitted by your partner, Mr. Marvin Nichols, to the contractors, Messrs. Dobson and Robinson?

- A. Well, those specifications were designed to meet the particular condition here and to cover the particular thing which we were pricing. No pipe lines have been constructed under those particular specifications. However, I am sure that where an earth work contractor would take a separate contract for earth work excavation on a pipe line he would use substantially similar specifications.
- Q. Have you ever seen any specifications for natural gas pipe line construction which are similar to the specifications submitted by your associate to Messrs. Dobson and Robinson?
  - A. Yes, I have seen those specifications, and at this time I do not recall anything that would cause me—or at the

time I read those specifications I did not note anything that would cause me to think the specifications which we used were not proper specifications. We checked those specifications against other specifications.

Q. But you are unable to recall or relate any single natural gas pipe line that was built under specifications similar [fol. 2893] to those which Mr. Nichols prepared for the

two contractors who have testified?

A. No. We have in our files specifications for a number of pipe lines which were actually built, and in arriving at the specifications we checked them against other specifications.

- Q. Now, you did not accept Mr. Biddison's or the company's cost of excavation?
  - A. No, we did not.
- Q. You related yesterday the reasons which, to your mind, were sufficient for the exclusion of omissions and contingencies in connection with certain of the Transmission Line Equipment and possibly other property?

A. Ves.

- Q. Didn't you state that the reason for the exclusion of omissions and contingencies was in large part due to the fact that the company's costs were based upon actual performance records and cost records?
  - A. Yes, that is correct.

Q. Now, since you did not adopt Mr. Biddison's costs, doesn't it eliminate in part your reasons for the elimination

of omissions and contingencies?

A. No, and I will tell you why. On Line "B" for the north end—Line "B", incidently, was built before Line Second "B" was, and certainly had the pick of the route. Certainly the excavation on the second line would not be any better than on the first line. Now, the excavation on [fol. 2894] Line "B" was classified by the barring method—that is, where they are parallel and only 75 feet apart; the classification there was 13.8 per cent hand excavation. On Line Second "B", where actual measurement of the quantities was made, hand excavation was less than one per cent, and if you assume that all of the hand excavation on Second "B" was thrown into the north end it would be but slightly over one per cent, which compares with the 13.8 per cent on Line "B". On rock, there was 9.07 per cent actually incurred on Line Second "B". The rock estimated

by the barring method was 6.7 per cent. There is a divergence there as between the two methods. Now, when you apply the prices used by Mr. Biddison as found by the actual measurement method, he would get an average price of 76 cents per yeard, and using the barring method you would get a price of \$1.00 per yard—that is, for 81 per cent machine excavation on the whole system. In other words, if he had taken those lines which may be said to be typical of the whole system, and used those prices rather than applied those prices to the results of the classifications made by this barring method, he would have a price some six hundred thousand dollars less for his excavation than by the classifications as found by the barring method, and which found a great deal more rock than found by the actual measurement method for rock, and also that the excavation by hand is a great deal more than actually was incurred in the construction of the properties.

[fol. 2895] Q. Have you completed your explanation, Mr. Freese?

A. That is one of the reasons why I think that the allowance for omissions and contingencies was in error. There is just as much reason to have an offset of the other kind, and I think that is shown by the field line equipment, particularly, where we found that there were some Forty or Fifty Thousand Dollars worth of equipment which should not have been included and that \$50,000 has not been deducted in this appraisal.

Q. Mr. Freese, speaking of Line Second B, will you give me the total cubic yards and the cost per cubic yard for machine excavation which you have used?

A. 281,137.1 cubic yards of machine excavation at  $37\frac{1}{2}$  cents, or \$105,426.41.

Q. Will you give me the same figure for the cubic yards and cost on hand excavation in connection with the machine excavation?

A. Well, that 281,137.1 cubic yards includes the hand excavation which would be done along with the machine excavation.

Q. How many men would accompany the machine for that hand excavation work?

A. I don't know?

Q. You don't know?

A. No.

- Q. Well, didn't Mr. Dobson testify on yesterday that two men would accompany the machine in connection with that machine excavation?
- A. No sir; you misunderstood Mr. Dobson. The purpose [fol. 2896] of those two men behind the machine was simply to clean up, and not to make any hand excavation at all, but simply to clean up and follow the machine. He had an entirely different allowance for that hand excavation work, and he so stated.
- Q. As a matter of fact, didn't Mr. Dobson state that those two men were to dig the bell holes?
- A. Yes, if any such were incurred, but that was not to include the hand excavation for skips at all; I think he did mention the bell holes, but he didn't say anything about skips in the machine excavation.
- Q. In other words, any hand excavation which accompanied the machine excavation, under your method of determination, is included in connection with your cost of 37½ cents per cubic yard for the machine excavation?
- A. It certainly is, and that was understood by the contractors, and when they went over the lines they understood it, and when they examined the lines, that all of that work would be included in that price.
- Q. Now, will you give me the total cubic yards and the cost per cubic yard for the hand excavation?
- A. For the hand excavation, there were 1,345.2 cubic yards, at \$1.31 per cubic yard.
- Q. Will you give the same for rock excavation on Line Second B?
- A. I beg your pardon—that was on Line A that I read into the record there for hand excavation. On the B system, it is one thousand——
- [fol. 2897] Q. No, not line B. I want it for Line Second B, and second B only.
- A. All of the hand excavation on second B was encountered in connection with the machine excavation, and there were no taps off of that line which would be done purely by hand, and there was no hand excavation on that line except that incurred in skips which the machine could not handle.
- Q. I believe my question was as to the number of cubic yards and the cost per cubic yard for the rock excavation on Line Second B.

A. Well, I had given the hand excavation in error, and I wished to correct that error. The rock excavation on Second B was 15,215.4 cubic yards.

Q. In what total amount? Well, if it is necessary for you to make a computation, Mr. Freese—you merely applied

\$3.50 per cubic yard to it, did you not?

A. That is correct.

Q. Now, will you give me the cubic yards and the cost per cubic yard for the machine excavation on KB 16 inch—and of course throughout, Mr. Freese, I am asking for the information in connection with your exhibit.

A. Certainly. The yardage for machine excavation on KB 16 inch was 26,780.2, which we priced at 37½ cents per

cubic yard.

Q. Now, will you give me the same information covering

the hand excavation on KB 16 inch?

A. There was no hand excavation on Line KB 16 inch, [fol. 2898] except in con-connection with the machine excavation. In fact, the company in their estimate of the hand excavation did not include any hand excavation on that line, even, separate from the machine excavation.

Q. Can you give me the cubic yards for rock excavation

on Line KB 16 inch?

A. 2,487.8.

Q. Now, Mr. Freese, I would like to have similar information covering Line K-5—that is the quantity of machine excavation and hand excavation and rock excavation?

A, On Line K-5, the machine excavation was 21,658.5 eubic yards. That is the combined machine and hand, although the company does not show any actual hand excavation incurred even in connection with the machine work. The rock excavation was 2,284.1 cubic yards. Now did you ask for another line besides K-5?

Q. I would like to have it for K5-1.

A. Now, on K-5, that is the six inch section of K-5 which I just read into the record. For the four and the three inch, there was 12,612.3 cubic yards of machine excavation and 1330.1 yards of rock excavation. No hand excavation is shown by the company for this line K-5, and of course our figures are for the combined machine and hand anyway.

Q. Give me the same information for Line O-29.

A. I have not given it for Line K-5-1; that was for K-5. Now for Line K-5-1 six inch, 9268.6 cubic yards of combined [fol. 2899] hand and machine excavation. There was 635.9

cubic yards of rock excavation. On Line K-5-1 four inch, there was 9,568.1 cubic yards of combined hand and machine excavation and 656.4 cubic yards of rock excavation. Now, which was the O line you wanted?

Q. Line O-29.

- A. On Line O-29, eight inch, there was no rock excavation nor on the O-29 six inch, and the combined hand and machine excavation on O-29 eight inch was 20,333.6 cubic yards, and O-29 six inch was 29.466.6 yards.
  - Q. Did you give the rock excavation?
  - A. There was no rock excavation on O-29.
  - Q. And you have given the hand excavation?
- A. That is included in our combined hand and machine excavation figure.
- Q. In other words, as you figured it, there was no separate hand excavation in connection with that line?
- A. Not where the hand excavation and the machine excavation is figured as a combined figure.
- Q. Will you give me the yardage of hand excavation, machine excavation and rock excavation on L-26?
- A. L-26, six and four inch. 16,084.3 yards of combined hand and machine excavation, or rather, machine and hand excavation. There was 1.15 per cent of that which had hand excavation in connection with the machine excavation, and there was no rock excavation.
- Q. Now Mr. Freese, you have adopted a figure of  $37\frac{1}{2}$  [fol. 2900] cents per cubic yard for machine excavation, covering the entire transmission line equipment?
  - A. That is correct.
- Q. How would you segregate that 37½ cents as between the clearing for the ditching machine, the ditching machine operation and the crumming of the ditch behind the machine?
- A. I have made no such segregation. I have simply asked the contractors for their over-all price, and except for the segregation which you requested the contractors for, since our information is based on the over-all bid given by them, that information is the only information I would have in that respect.
- Q. How many men would accompany the ditching machine, on the basis of your 37½ cents price, for the doing of excavation work along with the machine?
- A. I do not recall, just now, what Messrs. Dobson and Robinson included in the figures they gave for that, but

our figure of course is based upon their detail in that respect.

Q. Well, what is the cost of crumming the ditch?

A. I do not know that separately, but only the total.

Q. Well, what would be a fair cost, irrespective of these contractors bids, for the cost of crumming the ditch?

A. I don't know. We used no such figure in any way in this appraisal, but took only the total cost given us by the contractor.

Q. Well, you are an engineer, and I am asking you for [fol. 2901] your independent judgment as an engineer, as to how much should be allowed for crumming costs, in connection with machine excavation.

A. Without making a detailed study and getting the detail together, I would not be willing to make any such an estimate.

Q. Well, you never have made any such an estimate, have you, Mr. Freese?

A. Yes, I think possibly in connection with the appraisal which we made before the Oklahoma Commission, that I did make such an estimate.

Q. What was that crumming cost as determined by you at that time?

A. I do not have those figures with me.

Q. Were any condemnation costs included in Mr. Steinberger's analysis of rights of way costs, which resulted in disclosing a cost of ninety-two cents, plus, for rights of way in connection with the transmission line equipment?

A. As I recall those detailed figures as we examined them from the company's books, there were some small condemnation costs incurred in connection with Line O, or some of the O taps.

Q. Are you able to state to what extent condemnation costs entered into the determined cost of the company of 92 cents plus per lineal rod?

A. No, it is practically nil, though. Practically no condemnation costs were included in there.

Q. In other words, in the actual costs from a number of lines and rights of way, as studied and determined by Mr. [fol. 2902] Steinberger, there were no substantial condemnation costs included?

A. That is correct.

- Q. Now, do you know what the experience of the company was in 1924, 1925 and 1926, in connection with condemnation work?
- A. No. It is quite possible that you had quite a bit; but I only assumed that if there was a change in that respect, that the company was willing to pay what was asked rather than go to the trouble of condemning.

Q. Does the company have any lands through the five

civilized tribes of the State of Oklahoma.

A. Yes, but not included in our appraisal.

- Q. Do you know whether any of the costs of rights of way which were studied by Mr. Steinberger included any costs for rights of way in Oklahoma?
  - A. A very small amount?
  - Q. A very small amount.

A. Yes.

- Q. Do you know how many miles of rights of way were included in that study, or did you give it in varas on yesterday?
- A. Well, I gave the average length per piece of right of way bought by the company in that study, which as I remember it now was 107 varas.
- Q. Did you have the total amounts of rights of way, or are you now able to give the total amounts of rights of way, expressed in roddage or otherwise, which were included in that study by Mr. Steinberger?

[fol. 2903] A. I have that figure—not with me, but I can look it up for you if you like.

- Q. Now, on yesterday Mr. Freese, you testified that on welding costs of the company, that they were given to you by Mr. Phillips—J. A. Phillips or by his organization. Do you now wish to correct that testimony?
- A. No. Mr. Phillips furnished us the costs, as set up on the books for about the fifteen major lines which have been last built by the company. He did not break it down into any further detail than was given from the books, but simply copied it from the books, and we made all analyses from those figures furnished to us by Mr. Phillips. I have those costs on each particular line, and I have in my papers here a breakdown of the costs incurred on those lines, and a comparison of the actual cost with the appraised cost.
  - Q. As a matter of fact, instead of those being given to

you by Mr. Phillips, from the books of the company, weren't those costs furnished to you by Mr. Steinberger, valuation

engineer for the company?

A. No, sir. However, I did check very carefully the costs as found by Mr. Steinberger and as read into the record in detail, by him, in the hearing before the Railroad Commission. However, on our part, on every line built by the company since 1929 of every size, we had every cost incurred by the company taken off the books, and I have with me a breakdown of those costs which I will be glad to read into the record.

[fol. 2904] Q. During the progress of the hearing of this case before the Railroad Commission, didn't you request, and didn't Mr. Steinberger furnish a complete breakdown of the company's actual experience in connection with its actual welding costs?

A. Yes, he did. As far as I know, Mr. Steinberger has furnished us with every bit of information, as to the actual costs incurred by the company, which we have ever asked

him for—and we have asked him for a great deal.

Q. Now Mr. Freese, when you came to your determination of the so-called non-physical values, or general construction overheads the first item is preliminary and organization expense, is it not?

A. Yes.

Q. Does that appear on page 39 of your Exhibit?

A. That is correct.

Q. Now, where did you get the several figures covering preliminary geological investigations and preliminary engineering investigations, and so forth, as appearing on

those pages?

A. As testified to yesterday, I took those figures—except for federal capital stock tax, which we have based upon the actual capital structure of the company rather than the hypothetical structure—and except for that figure, we took them all from the company's Exhibit 28, and adopted those figures.

Q. In other words, each and every item of preliminary and organization expense as set forth on page 29 of your exhibit, is a result of your adoption of estimates of costs

made by the company's engineers?

[fol. 2905] A. Yes, and I certainly do not think any of them are too low.

Q. But each and every figure that appears on page 39 of your Exhibit 6, is merely an adoption of some figure contained in Defendant's Exhibit 28?

A. Yes, where there would be any costs incurred at all of this sort, I have taken the company's full figure in that

respect, and I think that they are liberal.

Q. On page 37, you give a detail of your computation of administration and legal expense during construction?

A. Yes.

Q. Engineering and supervision during construction, and taxes during construction?

[fol. 2906] A. Yes.

Q. Do you know what the historical experience of other companies has been in connection with wholesale construction of natural gas projects, similar in all essential respects to the reproduction of the Lone Star Gas Company system?

A. No, but in connection with these costs, I made an examination of some Seventeen Million Dollars worth of actual construction costs incurred by the Lone Star Gas

Company.

Q. And the actual construction costs or actual administration and legal expenses of the company incurred by the company during some \$17,000,000.00 worth of work was the real basis for your determined allowance, was it not?

A. Well, as explained in detail on yesterday, the allowance of seven per cent for combined engineering and legal and administrative costs, is substantially in excess of the maximum of 4.48 that could have been incurred by the company. The actual cost charged on the books of the company was only 1.49 per cent as compared with the seven per cent which I have used.

Q. Mr. Freese, are historical reproduction costs, incurred by a large operating organization, comparable to the costs which would be incurred—that is, I refer to general undistributed costs, comparable to the costs which would be

incurred in the reproduction of a new project?

A. Mr. Griffith, I think the only sane way to reconstruct a property like the Lone Star Gas Company would be to construct it partly during operations, during the period when it was being operated, and I think the \$17,000,000.00 [fol. 2907] in three years represents a fairly sizable construction program, and if all of the work were done at that same rate, that would certainly not be an unreasonable wholesale construction or reproduction program.

Q. Mr. Freese, have several large natural gas pipe line projects been constructed in the United States in the last

three or four years?

A. Yes. I don't know of any as large as the Lone Star Gas Company. The Northern Natural Gas pipe line, which is a sister company, is a very large company. I won't say it is a sister company, but the Lone Star Gas Corporation owns one-third of it, as I understand it.

Q. Did you make any attempt to find out and ascertain what the actual administrative and legal expense had been in connection with the construction of that company's prop-

erties?

A. No, and if I had made such an attempt, I would prob-

ably have been unsuccessful.

Q. Was the Southern Natural Gas Company, another large natural gas project which was constructed in the last three or four years?

A. I don't know whether it has been built within the last three or four years or not. It was substantially completed

three or four years ago.

Q. Did you make any attempt to ascertain what the actual administration and legal expense of that company was?

A. No, sir.

Q. You did not? [fol. 2908] A. No sir.

Q. In connection with its wholesale construction?

A. No.

Q. Did you make any attempt to ascertain what the actual undistributed and general expense of any of these

large natural gas projects were, in construction?

A. No. I felt like the information that I had with reference to the \$17,200,000.00 worth of work done by the Lone Star Gas Company, was the best possible information I could get with respect to the Lone Star Gas Company.

Q. But where the company had excavation costs on 487 miles of machine excavation, you did not see fit to adopt

those costs, did you Mr. Freese?

A. I think I have explained why I did not see fit to apply costs where the actual yardages were measured, and where the percentage of hand excavation was very low, to the system as a whole, where the yardages and classifications were determined by an entirely different method, which gave ten times as much hand excavation as was incurred on the lines studied.

Q. And you are now referring to Line B and Line Second B again, are you not?

A. I am referring to the system as a whole. And I can read those classifications for the system into the record,

if you please.

Q. Well, you can have your counsel do that, if you wish. Take the item of engineering supervision on page 37 of Plaintiff's Exhibit 6. What do you allow for engineering supervision?

[fol. 2909] A. Five per cent.

Q. Computed to be \$1,705,863.84?

A. Yes.

Q. Now, that would be made up of a number of various item-, would it not Mr. Freese?

A. Yes.

- Q. All right; how much of that total amount would be for preliminary designs and plans?
- A. Well, on a system like the Lone Star Gas Company system, the preliminary plans and estimates and such as that could be done for between one-half and one per cent.

Q. Well, which would you adopt?

A. I would adopt about three-fourths of one per cent.

Q. About three-fourths of one per cent?

- A. However, as stated before, the seven per cent was checked back against the actual costs, and if you take the actual costs as incurred, they would probably run less than that.
- Q. Now, Mr. Freese, I am questioning you about your adoption of this figure of five per cent that you testified to.
- A. Yes, and you want a breakdown of this figure into the different parts.
- Q. Yes, that is it exactly; I want a breakdown of that five per cent.
- A. I should say that three-fourths of one per cent is attributable to the preliminary plans.
- Q. How much do you attribute to field supervision? [fol. 2910] A. Field supervision would be two and one-half per cent, of that five per cent.
- Q. And that would be three and one-fourth per cent, would it not, so far?
  - A. Yes.
  - Q. That you have accounted for?

A. Yes.

Q. How much would be taken up by general office supervision?

A. That two and one-half per cent includes all general office supervision, in connection with the actual supervision, and the three-fourths of one per cent, includes all the general office supervision in connection with the preliminary work, and the remaining one and three-fourths per cent would include all of the office supervision in connection with the detail and final as-built plans.

Q. Now, Mr. Connor, in his estimate of the reproduction cost of the final engineering plans and drawings of the company, determined that the final engineering records of

the company would cost approximately \$800,000.00.

A. Yes.

Q. That is, to reproduce them, did he not?

A. I assume that is the correct figure; it is substantially

that, anyway, as I recall.

Q. And that figure was included by Mr. Biddison in his direct structural costs of the physical property of the company, was it not?

[fol. 2911] A. Yes.

Q. How many hours have you spent checking and inventorying the records in the engineering department of the

company at the city of Dallas?

A. We have made no inventory of the records of the company, and I think it would be just as foolish for me to go into our own map room and take the plans there and estimate the costs that have been incurred on some Twenty or Thirty Million Dollars worth of engineering work, in looking at those and counting them, and trying to estimate what they would cost.

The Court: Gentlemen, I think we will take a few minutes recess at this time.

(Thereupon, at 10:30 o'clock A. M. a recess was taken until 10:40 o'clock A. M.)

[fol. 2912] The Court: All right, gentlemen.

Q. Mr. Freese, how many days after you actually spent in the Engineering Department of Lone Star Gas Company at Dallas?

A. Oh, I don't know that it has been necessary for me to go there. I was probably over there for some reason or other at a time or two, but I don't recall just now why

it was necessary for me to go over there. I have gone to Mr. Steinberger's office for information a great number of times.

- Q. Well, would you say that you had ever spent as much as an hour in the Engineering Department of the Company at Dallas?
- A. I don't know that I have ever been in the Engineering Department at Dallas.

Q. Have you ever been in the Geological Department in the office of the Company at Dallas?

A. The only time I can recall was when we were first getting our geologist, Mr. Maddren, lined up for some of his investigations over there. However, we have secured a great deal of information from time to time from the Geological Department by men that I have sent there to get the information. Just how much time has been neces-[fol. 2913] sary for them to spend up there getting the information I wanted, I don't know.

Q. What examination have you personally made of the geological records which the Company has in the Dallas office?

A. I have made no examination. I have analyzed or examined a complete list of all of the information that generally is submitted by the Company in these hearings before the Railroad Commission, but that is the only knowledge I have of the records of the Company in that respect.

Q. Mr. Freese, is your Exhibit 6 an historical reproduc-

tion cost estimate?

A. It is based largely upon the historical experience of the Company, yes. However, it is plenty high to take care of any reasonable reproduction wholesale program undertaken at this time.

Q. Mr. Freese, in your computation of taxes and interest during construction, do you assume any fixed or definite construction period in which the property would be reproduced wholesale, or reconstructed wholesale?

A. No; as I say, we took the actual taxes paid during a certain period—1929 and 1930—that could possibly be ascribed to work under construction. During that period there was some seventeen million dollars worth of work [fol. 2914] done; we multiplied that by three to get the equivalent that the properties—that is, as the ratio of seventeen million to all the properties, and then we just doubled that, as a factor of safety.

Q. Well, you didn't use, then, any definite wholesale construction period in your determination of taxes and interest

during construction?

A. No: however, I am of the opinion that in a wholesale reproduction cost new program that until that property was put into service, that practically none of it would ever be taxed by any Texas taxing body.

Q. Did I ask you that, Mr. Freese?

A. You asked me if I had assumed a wholesale reproduction new program, and I made the best answer I knew how

to make to what I thought you were driving at.

Q. Well, now, Mr. Connor and Mr. Biddison and Mr. Steinberger estimated that the construction work involved in the reproduction of the Lone Star Gas Company's property would take place over a three-year construction period, did they not?

: A. Yes.

Q. Do you agree that it would take three years in which to reproduce the property of the Company in a large wholesale construction project?

A. Well, that would be rushing it pretty fast. It might [fol. 2915] be physically possible to do it in three years.

Q. As a matter of fact, when you testified in the Oklahoma case, didn't you say that you thought three years was about right?

A. Before I would answer that question, I would like to see my testimony, Mr. Griffith, in that case.

Q. You are unable to recall what you did testify to?

A. No, but right now I would say that what I did testify to was that three years was a minimum.

Q. Three years was a minimum period?

A. Yes.

Q. For the construction of the property?

A. Yes.

Q. Now, you did not determine your interest during construction by assuming any fixed or definite wholesale

construction period?

A. No, I took the actual time that I thought it would take to construct each particular piece of property, and I assumed that the work would not be started on that particular piece of work before there was some reasonable hope that the unit would be used when it was finished.

Q. Mr. Freese, have you had any experience in connec-

tion with the raising of the sum of money which would be necessary for the reproduction of the Lone Star Gas Com-

[fol. 2916] pany's property?

A. Well, I have had experience in the raising of money in sizable amounts—not that much, but four and one-half millions in one case and six and one-half millions in another case, for the construction of projects on which we were working, and lately, in connection with the work for the Fort Worth Independent School District, where we raised four and one-half millions of dollars for the work there.

Q. All of the experience you have had in connection with the raising of sizable sums of money for construction work has been in connection with municipal, state, county, city, or some other political subdivision, was it not?

A. No, right now we are negotiating with the Government for the construction in one case of a natural gas pipe

line.

Q. Well, that is to be a governmental loan, if it is made, is it not?

A. In two cases. Yes, that is to be a governmental loan; but I think the biggest pipe line that has been constructed lately has been constructed out of Government funds, and I refer to the big line from El Paso west to Phoenix, which is constructed out of R. F. C. loans at five per cent.

[fol. 2917] Q. Is it your testimony that the pipe line extending from El Paso to Phoenix is constructed by Federal

Government money?

A. There is one large line in that neighborhood that has been financed out of R. F. C. funds within the past year or so. Now, I think I am right in the fact that it is the line from El Paso to Phoenix, but I am not positive.

Q. Mr. Freese, on yesterday Mr. Fitzhugh asked you concerning your failure to include a separate allowance for Going Value, Going Concern Value, or Cost of Reproducing

the Business.

A. Yes.

Q. You made no separate allowance in connection with your Exhibit 6 for Going Value, Going Concern Value, or Cost of Reproducing the Business, did you?

A. No.

Q. Was it your testimony that you had, nevertheless, allowed something for Going Value?

A. No; as I recall my specific statement, it was that we

had priced everything as usable, as something that was in use, or could be used, and not something that had no business or no use, or was junk value, or something to that effect.

Q. Well, did you include anything in your Exhibit 6 for [fol. 2918] what is commonly known as Going Value, Going Concern Value, or Cost of Reproducing the Business?

A. No.

[fol. 2919] You and your associate, Mr. Marvin Nichols, made appraisals of the Denton and Sherman distributing plants of the Municipal Gas Company, did you not?

A. Yes.

Q. In those appraisals did you include anything for [fol. 2920] Going Value, Going Concern Value, or Cost of

Reproduction of Business?

A. Yes; in those cases we capitalized the historical losses or the loss of revenue on idle plant that would probably be incurred in the reproduction cost of those plants. However, in this particular instance I don't believe that such cost would be incurred. I think that the lines could be built in such way that no such losses would be incurred, for the simple reason that there are three or four lines going into Dallas and Fort Worth. I think if you even imagined, if you were building up a hypothetical plant, that you would just as well imagine that you would build those lines over as needed. Now, as far as the history of the Company is concerned; I think there have been no such historical losses on idle plant.

Q. Mr. Freese, when you and Mr. Nichols determined Going Value or Going Concern Value or Cost of Reproducing the business in connection with your appraisals of the Sherman and Denton distributing plants, did you make that determination by computing the fixed charges on idle plant in somewhat the same manner as used by Mr. Connor in connection with his determination of Going Value or Cost [fol. 2921] of Reproduction of Lone Star Gas Company's

business, as set forth in Defendant's Exhibit 28?

A. Well, what we did do was to figure out what the losses on idle plant would probably be in the reproduction of those properties, and included what we thought that would be, in those appraisals.

Q. You refer to operating losses or lack of return or in-

terest during the period when the business was being developed?

A. Lack of return or interest.

Q. Your determination of Working Capital on page 40

of Plaintiffs' Exhibit 6 is made as of what date?

A. As of the date of our appraisal—June 15, 1934. Now, as to whether those materials and supplies, in the amount of \$416,000.00, were the exact amount on that particular date, I don't know; but I do know that they were somewhere in that neighborhood.

[fol. 2922] Q. But as of what date did you take the materials and supplies in the amount of \$416,000.00 set out on page 40 of Plaintiffs' Exhibit 6?

A. March 31st, as I recall it.

Q. You mean March 31, 1934?

A. Yes. I would like to check that date, but as I recall it, that was the date.

- Q. Do you think you used the Advances on Gas Purchase Contracts, and Prepaid Insurance and Rentals, as of the same date?
  - A. Yes.
- Q. You are now unable to state with certainty as to the specific date used?
  - A. I am fairly positive that it was March 31st.
  - Q. 1934?
  - A. 1934.
- Q. Now, Mr. Freese, is there included in any place in connection with Plaintiffs' Exhibit 6 anything covering gas wells, gas well equipment, gas leaseholds, reserves, or other production system property of the Company?
  - A. No.
- Q. That is not included in your appraisal as set forth on pages 1 to 40, inclusive, of your Exhibit 6?
  - A. No, sir.
- Q. The Company does have a number of gas wells, a lot of gas well equipment, and gas leaseholds and gas reserves, [fol. 2923] and other production system property situated in the geographical confines of the State of Texas?
  - A. Yes.

Q. But that is not included in your exhibit?

A. No; as the Exhibit very specifically sets out, this exhibit covers only the Texas gathering, transmission, compressing, and general property.

Q. Therefore, to the extent that you have excluded what might be called the production system property, your total of \$40,256,862.39 is less than any value which could be determined for the entire property—public service property of Lone Star Gas Company, within the geographical confines of the State of Texas?

A. That is correct. This was not intended to take care of or compensate in any way for that gas production.

Q. How many appraisals of the Lone Star Gas Company

system and property have you prepared, Mr. Freese?

A. Oh, we prepared a detailed appraisal for the Corporation Commission of Oklahoma, and one for the Railroad Commission of Texas, and then—

Q. As of what date?

- A. December 31, 1931. And then later on in the hearing before the Railroad Commission, to simplify matters, as we have done in this case, we accepted certain of the Company's costs where they were substantially the same as the [fol. 2924] costs which we had found in our detail appraisal; and also in this case we have accepted certain of the Company's costs.
- Q. Mr. Freese, the appraisal which you first presented to the Railroad Commission of Texas was dated as of December 31, 1931, was it not?

A. Yes; I have so stated.

Q. You were paid \$45,000.00 for that appraisal and report out of the funds of this state, were you not?

A. That is correct.

Q. Whatever happened to that report after you presented it to the Railroad Commission?

A. Well, it has been mainly used for checking all of the prices that have ever come into any of these cases.

Q. Was that appraisal presented by you in the hearing before the Railroad Commission in Gas Utilities Docket No. 75?

A. No; we presented an entirely new appraisal in that case.

Q. Now, in the first appraisal which you prepared and presented to the Railroad Commission of Texas did you determine that the reproduction cost new of the Lone Star Gas Company's public service property in Texas and Oklahoma was \$53,005,251.39?

A. I would like to see that figure: I assume that is correct, but I would like to check it.

Q. I hand you what purports to be Volume 1 of the [fol. 2925] appraisal that I have just been referring to,

and I will ask you to refresh your memory,

A. Yes; we found a reproduction cost of fifty-three million dollars, and a present worth of forty-one million dol-

Q. Now, in connection-

A. That included both Texas and Oklahoma, whereas this includes only Texas; and that included all of the production properties, and this does not include the production properties.

Q. And in connection with this appraisal, did you segregate the properties in Texas and the state of Oklahoma?

A. No; but I think in the three or four volumes that fol-

low setting up the details, they are segregated.

Q. Again to refresh your memory, Mr. Freese, will you refer to page 1, Volume 1, of the appraisal which I have just presented to you? Does that show a segregation in Texas?

A. No; the summary does not show a segregation. However, the detail work papers show in each case just where the property is located.

Q. As a matter of fact, on page 1 of the Exhibit which I have just tendered to you, do you not show a total evaluation of the Texas property in the amount of \$47,355,114.77?

A. Yes; it has also been segregated in this second sum-

mary here.

Q. Is the figure-[fol. 2926] A. The first summary, however, does not segregate as between the two.

Q. But the second summary does segregate the Texas property and shows that your estimate of the reproduction cost new of the Lone Star public service properties in Texas as of December 31, 1931 was \$47,355,114.77?

A. That is correct.

Q. Did the Railroad Commission ever make any use of this report, as far as you know, except to receive it, and file it, and pay you your forty-five thousand dollars?

A. Yes; they have used that continuously up until now

in checking the prices as they vary from time to time. Pipe

has gone down a great deal-since 1931.

Q. Mr. Freese, I hand you a copy of the findings, order, and opinion of the Railroad Commission of Texas in Gas Utilities Docket No. 75. I will ask you to point out to me where on any page of that finding—those findings, opinion, and order of the Commission, any reference is made to the appraisal date as of December 31, 1931, and which appraisal was the first appraisal you ever presented to the Railroad Commission?

A. No. Where they have used our figures, or refer to our [fol. 2927] figures, they refer to the second appraisal, which was submitted in Gas Utilities Docket Number 75. That appraisal was not submitted in Gas Utilities Docket Number 75.

Q. Now, when you did-

Mr. Fitzhugh: You mean the one he is talking about?

A. The one he has referred to has never been submitted to any hearing before the Railroad Commission.

Q. When you did finally testify before the Railroad Commission in Gas Utilities Docket Number 75, you completely abandoned your first appraisal, did you not?

A. We did not use it in that hearing. We used a new

appraisal.

Q. As of the same date?

A. As of the same date.

Q. All right. And in that new appraisal, which you did testify to before the Railroad Commission of Texas, your reproduction cost new of the property had shrunk some seven million dollars, had it not?

A. No; I don't know that they cover exactly the same

property.

Q. As a matter of fact, both appraisals were made as of

the same date?

A. They were made as of the same date; but there were certain corrections; for example, in the one case we used what the Company had actually paid for the leaseholds, which included a great deal of gas well construction bought along with the leaseholds; in the other appraisal, they were set up separately.

[fol. 2928] Q. Mr. Freese, when you finally did testify before the Railroad Commission of Texas in Gas Utilities

Docket No. 75, what did you determine to be the reproduction cost new of the Lone Star Gas Company's public service property in both Texas and Oklahoma?

A. I don't have the volume that shows our total figure.

Q. I want to refresh your memory about your numerous exhibits, Mr. Freese, and I, therefore, present to you Volume 3 of a report on the reproduction cost new appraisal of physical properties of Lone Star Gas Company, December 31, 1931. Now, this was your second appraisal, was it not?

A. This report does not contain the figure which we finally arrived at as the total cost of the Lone Star Gas Company. I had that volume.

Q. What did you finally determine was the total reproduction cost of the Lone Star Gas Company's public service property in both Texas and Oklahoma as a result of your second appraisal?

A. As I say, we found what was fair and reasonable as of that date. Now, what that particular figure was I don't know, but I will be pleased to look it up for you and bring it to you.

Q. I want to refresh your memory again, Mr. Freese. Wasn't the grand total of the reproduction cost of that property determined by you in your second appraisal to be \$46,810,134.34?

A. That is not our exhibit. So far as I know that may be [fol. 2929] exactly correct, but I don't know just what computations were made and what they include; but it was somewhere in that neighborhood, whether forty-six or forty-eight million, I don't know.

Q. As a matter of fact, you know that \$46,810,134.34 is correct, do you not?

A. No.

A. I don't know that it is not correct; but I certainly don't know that that is the right figure.

Q. It so happens that the figure which you used of approximately forty-six million dollars—you say it might have been forty-eight million dollars—was almost the iden-

tical figure which was adopted by the Railroad Commission of Texas in its evaluation; isn't that true?

A. Well, the figure which they have used here—

Q. Well; what was that figure?

A. Well, they determined a rate base as of December 31, 1931 of \$46,246,617.53. However, that is not their figure for reproduction cost new exactly, because they have taken [fol. 2930] the depleted value of the leaseholds, and of automotive equipment, and of drilling repair and cleanout tools and equipment.

Q. That would not occasion the difference between your first determined reproduction cost figure of fifty-three million dollars as set forth in your first appraisal made for the Commission, and the amount of \$46,810,134.34 set forth in your second appraisal for the Commission, would it?

A. No; but if you like I will be glad to explain those, and correlate them, and tell you just what they represent in each case.

Q. In connection with your exhibit 6 in this case you stated that you made no allowance for going value, going concern value, or cost of reproducing the business?

A. That is correct.

Q. In the first appraisal which you made for the Railroad Commission and covering the Texas property, what did you include in that appraisal for going concern value?

A. Now, this report was not presented in any hearing before the Railroad Commission. This was reported and [fol. 2931] testified to before the Corporation of Okłahoma, and that amount so testified to was \$1,250,000.00, which included the losses of return during the first years of the Company's history, and which we feel like have been amply amortized since that time.

Q. Mr. Freese, if you will turn to the first part of the first appraisal which you presented to the Railroad Commission of Texas, did you set forth in the appraisal a letter of transmission?

A. We did:

Q. Sending this appraisal to the Railroad Commission of Texas, and signed by "Hawley, Freese and Nichols"?

A. Yes, sir.

O And in that first appraisal, and covering the Texas

properties alone, you did advise the Railroad Commission of Texas that the going concern value of the Lone Star Gas Company property in Texas was \$1,250,000.00?

A. That is the figure included on that page, as pointed out. I notice we have the same figure for the combined prop-

erties of \$1,250,000.00.

[fol. 2932] Q. Does the figure of \$1,250,000.00 set out at page 1, Volume 1, of the first appraisal which you presented to the Railroad Commission of Texas show that you allowed for going concern value \$1,250,000 covering the Oklahoma and Texas property and business of the Lone Star Gas Company?

A. Yes.

[fol. 2933] Redirect examination.

## Questions by Mr. Fitzhugh:

Q. Mr. Freese, the appraisal which you submitted at the hearing before the Oklahoma Corporation Commission and to which Mr. Griffith has been referring was composed of a number of volumes besides the one which he had?

A. Yes; I think there were five or six volumes.

Q. As a matter of fact you had volumes comparable to those we have here on this desk with nice gold letters and leather covers and all that sort of thing?

A. I think I recognize some of them over on Mr. Griffith's

desk at this time.

Q. Almost as nice as those the company has in this case?

A. No, not quite.

Q. Now, your judgment in that appraisal was your independent judgment on every item; is that correct?

A. That is correct. It was my best independent judg-

ment on every item.

- Q. And at the hearing before the Oklahoma Corporation Commission Mr. Griffith examined you at length, did he not?
  - A. That is correct.
- Q. Having made a breakdown on your costs for grubbing and crumbling and everything?
  - A. Everything I had.
  - Q. For many days?

A. Yes, sir.

Q. Now, later on you appeared before the Texas Railroad [fol. 2934] Commission?

A. That is correct.

Q. About how many months later was that?

A. Oh, possibly a year.

- Q. I mean from the time you completed your first appraisal about how many months was it before you came before the Texas Railroad Commission?
- A. I don't remember just exactly how long it was between the time we finished and when we came before the Railroad Commission. I can get that.

Q. Well, it was quite a while?

A. Yes, sir.

Q. During that time did you have your men and were you working yourself at the appraisal that was to be presented before the Texas Railroad Commission?

A. Yes. We worked for several months revising those

figures.

Q. Did you in the interim between the time the appraisal was presented for presentation before the Oklahoma Corporation Commission and the time when you went into the hearing before the Texas Railroad Commission find out quite a number of new facts?

A. Yes. I think I can specify each one of the differences between the two reports and explain just exactly why there

is quite a difference between the two reports.

Q. Will you do that in a general way for the jury's benefit?

A. Well, one of the principal things was the Petrolia field [fol. 2935] account. We found that the company was losing money, that the amount gotten for the gas was less than the actual out-of-pocket operating expenses, and we could see no good reason for including that in the rate base. In the second place, when we presented our appraisal before the Oklahoma Commission it was our intention in evaluating costs to use actual costs to the company, and those figures were furnished to us by the company. We later found out that the costs for the leaseholds included gas well construction of a large part of the wells of the company, and we made that deduction. We made a deduction of a million two hundred and fifty thousand dollars for going value.

- A. Well, the million two hundred and fifty thousand dollars going value accounts for part of it and those others for the difference.
- Q. Now, then, when you included in your Oklahoma appraisal the item of going value as a separate allowance you did so for wholly different reasons from any reasons which you have expressed here in this present hearing, did you not?
  - A. That is correct.
- Q. At the present time you know, do you not, Mr. Freese, [fol. 2936] that the company has charged as a matter of historical fact from the inception of the business to this time all the costs which are ordinarily considered as going value as operating expenses?
  - A. Substantially so, yes, sir.
- Q. You also know that the company has a substantial earning record in the past as a historical fact?
  - A. Yes, sir.
  - Q. Based on rates in the past?
- A. Yes, sir, and with reference to going value we carefully examined the earning records of the company during the past to determine what, if any, losses on return existed or had been incurred.
- Q. You also know, do you not, from your general knowledge of the history of the company that in many cases the attachment of business has been instantaneous and without cost to the company?
- A. I know that in many cases it was very quickly acquired.
- Q. On page 33 of the Railroad Commission's order, in speaking about the cost of attaching business and the matter of acquiring customers, and so on, the Railroad Commission's order reads as follows: "It is just as logical to suppose that there existed at the inception of the business a waiting public urgently in need of natural gas service, with towns anxious to attach to the company's lines, in which case there would have been little, if any, development cost or expense of any sort in overcoming the inertia of a [fol. 2937] state business and in getting the business under way." Do you subscribe to that statement?
- A. I think if there were no natural gas system the folks would be anxious to obtain service of such a company.
- Q. The Commission's order goes further: "Such a business should pay its own way from the start and there is no

reason to assume that rates would not be sufficient from the beginning to pay all development costs, as, when, and if incurred." Do you subscribe to that statement?

A. Yes, except for a few years at the very beginning of the company, when the losses of return and book investment amounted to about four hundred thousand dollars, but which were very quickly made up in succeeding years

without any such losses on investment.

Q. The Railroad Commission's order continues: "The company serves a territory which has shown a substantial growth in both its population and in its business life and the company has expanded its system naturally as new markets have appeared. It is inconceivable that the company could have prevented new business from presenting itself as a natural consequence of the territory's development and it is certain that much of such new business came without any development expense whatsoever being actually incurred." Do you concur in that statement?

A. Yes, I think it is true.

Q. Now, what is the advantage, Mr. Freese, as between the method you have used in finding value and in present-[fol. 2938] ing your exhibits as opposed to coming in here and dumping on the table a big appraisal independently made?

A. Well, the main advantage is that it saves about three or four weeks time looking into the matter after it is presented.

Mr. Griffith: You mean three or four months, don't you, Mr. Freese?

A. Well, I was putting it at the minimum.

Q. That is, if you had come in and dumped your appraisal here the way the company did, we would have to go through it item by item and find the differences and work it out to get the value from the exhibits; is that correct?

A. That is correct, but where I thought their figures were

fair and reasonable I accepted those figures.

Q. Now, if we had gone into the company's appraisal thoroughly and meticulously the way we did before the Railroad Commission to find item by item how each item was arrived at it would have taken from now until past Christmas?

A. It took some eight months in that case.

Q. Then, if I understand you, Mr. Freese, wherever your final result as to an item of property was pretty close to

the company's to eliminate differences and to come to some conclusion you adopted their results?

A. That is correct.

Q. It didn't mean that you adopted everything they did to get that result, but simply the final, ultimate result?

A. What it means is that every figure in that appraisal is my best justment as to what is fair and reasonable as of

[fol. 2939] this date or as of the date of the appraisal.

Q. And where you have agreed with Mr. Biddison or any of the company's witnesses, that agreement does not prevent your exhibit as it now stands from being your independent opinion as an engineer as to value expressed page by page throughout your exhibit, does it?

A. No. Where I have accepted their figures I have used my judgment, as much or more so as where I used new

figures set out in the exhibit.

Q. What is the natural connection—or I will ask the question this way: Is there any connection, Mr. Freese, between the accounting system the company is using and has used in the past and the method or mode of finding value which should be used in finding the company's present worth?

[fol. 2940] A. There is a very close connection between the periods, or, rather, between the bookkeeping methods of the company which were used during the periods when operating expenses were being considered in connection with a case like this. It is true with reference to physical properties—take, for example, during the year 1930, they charged to operating expenses the actual construction of some physical properties; then those, of course, should be eliminated from either the expense account or from the appraisal. Now, that is ordinarily true with reference to depreciation and maintenance. If we charge certain items to maintenance accounts during the operating periods which are being considered, then we certainly should not include those as part of the percentage value applied to these reproduction costs.

Q. You are familiar, are you not, Mr. Freese, with the testimony of Mr. Hulcy heretofore given in which he said that all or most all, I believe he said, of the general overheads in the past have been charged to operating expenses?

A. Yes.

Q. That means, does it not, that the company has been [fol. 2941] repaid through operating expenses for all those

expenditures?

A. They have been included in the operating expenses. Except for going value, we did not take that matter into consideration at all; in other words, we simply allowed the full amount of those overheads, regardless of whether they had been charged to operating expenses or not. Now, during these periods which were considered, there was considerable work done.

[fol. 2942] A. They allowed during this time—well, we will take for the year 1930—or 1931, for which I have all the details; on every item of construction during that year, they allowed for engineering and supervision two per cent, capitalized, instead of the five per cent allowed by me. Now, if the engineering and supervision did actually cost more that this two per cent or if it cost five per cent as allowed by me, that difference was paid out of operating expenses and the profits which we are considering here, or the net earnings which we are considering, would have been greater by that amount, if they had charged the five per cent. Now, as to the administration and legal expenses, including clerical hire, two per cent was allowed on the books, the same as the two per cent allowed by me; that would be a washout in that respect.

[fol. 2943] Q. It is your opinion, though, is it not Mr. [fol. 2944] Freese, as a valuation proposition, that where the costs of general overheads and going value have been paid out historically through operating expenses in the past, that the inclusion of those items in a valuation to find present value for that company is a rather liberal procedure?

A. I think, particularly with reference to going value, that how they have charged those expenses in the past and more particularly how they are charging them now—in other words, the whole purpose of this evaluation after it is all finished is to see what percentage relation the net

[fols. 2945-2946] earnings bear to this evaluation. Now if, during the period considered, they have been charging the costs incurred to those operating expenses, you not only decrease the net earnings, but if you included the property itself, you would increase the rate base, and you would thus work both ends against the middle in that respect.

[fols. 2947-2950] Recross-examination.

### Questions by Mr. Griffith:

[fols. 2950a-2968] Reporter's certificate to foregoing transcript omitted in printing.

[fol. 2969] R. H. Montgomery, a witness for plaintiffs, having been duly sworn, testified as follows:

Direct examination.

### Questions by Mr. Stout:

- Q. State your name to the jury, please, sir. [fol. 2970] A. R. H. Montgomery.
  - Q. Where do you live, Mr. Montgomery?
  - 'A. Austin.
- Q. How long have you lived in Travis County, or Austin, Texas?
  - A. Twelve years.
  - Q. You were born, I believe, out here in Menard County?
- A. Born in Blanco, and lived in Menard about nineteen years.
- Q. What schooling and what education have you had, Mr. Montgomery?
- A. I am a graduate of the Teachers College at San Marcos, and have an A. B. from the University of Kansas and A. M. from the University of Texas, and my doctor's degree from the Robert Brookings Graduate School in Washington. I have been connected with various other institutions, doing some graduate work in two or three of them.
- Q. Do you hold a chair at the present in Economics in the University of Texas?

A. Yes, at the present time.

Q. In your courses that you teach and in your studies do you teach any courses in public utility matters?

A. Yes. That course is my principal field, both of study

and teaching.

Q. For the past ten or twelve years has your speciality in studying and in teaching been in utility matters?

A. Yes.

- Q. Have you lectured at various universities in the United States upon this subject, or these subjects?

  [fol. 2971] A. Yes.
- Q. Are you familiar, Mr. Montgomery, with the economic conditions of the State, the Nation, and the world—have you made a study of those conditions?

A. Yes, of course.

Q. You have opinions, have you, in regard to them?

A. Yes, many.

- Q. Are you familiar, with the cost of money and the so-called term of "cost of financing"?
- A. Yes, of course, in my studies we have to cover such subjects—

Q. Yes.

- A. —to know anything about corporate finance, utility finance.
- Q. From your study, from your observation, and from your experience do you have any opinion as to the effect that reduced rates have or tend to have upon the volume of increased business of a public utility?

A. Yes, I have my opinion, of course.

Q. Do you have a similar opinion as to what rate a utility should earn, or what would be a fair rate of return for a public utility?

A. Have I an opinion on that?

· Q. Yes.

A. Yes.

[fol. 2972] Q. Mr. Montgomery, in this case, briefly, the facts show or tend to show that the Lone Star Gas Company—this cause being a contest between the State of Texas on the one hand and the Lone Star Gas Company upon the other hand—that the Lone Star Gas Company is a pipe line company; it operates in Texas and Oklahoma

and transports and furnishes to the smaller communities and towns more gas and serves more of the smaller communities and towns than any other gas pipe line company in the United States.

Mr. Griffith: Your Honor, we object to that. There is no testimony here to support it.

The Court: No, there is no testimony that they furnish more gas than any other pipe line in the United States.

Mr. Stout: I mean to small communities and towns, Your Honor.

The Court: Well, I can't remember that evidence.

Mr. Stout: I can promise the Court it is in testimony from their own witnesses.

The Court: Well, if it is, I just don't remember it. Mr. Stout: All right.

Q. Anyway, the testimony shows that the Lone Star Gas Company is a pipe line company; that it transports gas to its affiliated corporations, which in turn carry it on to the domestic consumers within the towns and cities; the Lone Star Gas Company and the distributing companies connected to it and which in turn carry it to the domestic consumers in the [fol. 2973] towns and cities are affiliated to what is known as the Lone Star Gas Corporation which owns in excess of 99 per cent of the common stock of the Lone Star Gas Company and of distributing or other affiliated companies; and that on September 13, 1933, the Railroad Commission of Texas passed an order and promulgated it, the effect of which was to reduce the rate of 40 cents charged by the Lone Star Gas Company to the distributing companies to the amount of 32 cents per thousand cubic feet, being a reduction in the amount of 20 per cent. Now, from your knowledge, from your experience and study, can you tell the jury whether or not the effect of such a reduction is to increase the amount of consumption of gas and to tend to increase the volume of gas that would be served by the Lone Star Gas pipe line company if the lower rate were put into effect?

Mr. Shannon: Well, now, we object to that question and to any answer upon the part of the witness for the reason that the witness has not testified to any experience he has had in connection with the natural gas business or the way a fluctuation in rates in the natural gas business would

affect either the volume or the number of customers. We object because he is not qualified to express the opinion he has been called upon to express. We object further because the question is hypothetical and theoretical and because both the question and any answer which the witness. would give are necessarily of a speculative nature and can [fol. 2974] not be based on any actual facts or actual experience of the company in the past or other natural gas companies located in this particular territory. We object because the question and the answer sought to be adduced are of no probative force or effect and are immaterial and irrelevant; and further, because there are no pleadings to support it.

(Thereupon counsel went up to the Judge's Bench and discussed the objection.)

Q. You understand, of course, that in theory and in form the Lone Star Gas Company-or, at least, I will put it this way: The Lone Star Gas Company alleges in this cause and claims to be a wholesale company; in other words, it distributes gas at the city gates to the distributing companies and then they in turn carry the gas and transport it to the domestic consumers at the burner tips. Now, bearing that fact in mind, I will ask you whether or not the reduction to a 32 cent rate being put into effect would have the effect or tend to have the effect to increase the consumption of gas and increase the volume of gas business?

A. Yes, sir.

## Examination by Mr. Griffith:

Q. Doctor Montgomery, have you had any experience in connection with the natural gas business? [fol. 2975] A. No. You mean by "experience" have I worked for a natural gas company?

Q. Have you had anything to do with the financing, construction, operation or management of any natural gas enterprise at any place?

A. No. In my work, of course, such a thing would not be permitted by the State.

Q. Do you know what the volume of sales is of the Lone Star Gas Company of domestic gas for any yearly period? A. No. I have not made any study of the Lone Star-Gas Company as to that. Of course, I have seen the fields.

Q. You are not familiar with the volumes of sales of either domestic or industrial gas of Lone Star Gas Company over any period of time?

A. No.

Q. You understand that the Lone Star Gas Company is a wholesaler of natural gas?

A. So I have just been told.

Q. Prior to that time you didn't know anything about

the Lone Star Gas Company?

A. Well, not quite that. Of course, I have gone over their reports and such reports as Moody's Manual and Poor's Manual to know something about the financial and managerial tie-ups of the gas business and something of

the price of gas, and those things.

[fol. 2976] Q. Now, the testimony in this case shows that the Lone Star Gas Company sells gas at wholesale to the city gates of some 250 to 300 towns in the States of Oklahoma and Texas and that the distributing plants in those several towns and cities are owned and operated by the several distributing companies; for example, in the city of Dallas the Dallas Gas Company and the County Gas Company are the distributing companies which do the retail distribution.

The Witness: Your Honor, may I ask questions, too, because I want to know—

The Court: I think you had better understand it before you try to answer.

A. Are those local companies owned by the Lone Star

Gas Company?

Q. No, they are not. They are affiliated companies, however. The testimony in this case also shows that the distributing plants in Denton, Denison, Sherman, Hillsboro, Waxahachie, Wichita Falls, and other towns and cities are owned by the Municipal Gas Company. The testimony also shows that the distributing plants in the cities and towns of Temple, Greenville, Sweetwater, and others are owned by the Community Natural Gas Company. The testimony also shows that the distributing plants in the towns and cities of Waco and Paris, Texas, are owned by the Texas Cities Gas Company. The testimony further shows that the distributing plant in the City of Gainesville is owned

by the Gainesville Gas & Electric Company, and that the [fol. 2977] distributing plant in Waxahachie is owned by the Waxahachie Gas Company. Do you know anything about the historical cost, or the book cost, or reproduction cost of the public service facilities of those several distributing companies in the several towns and cities which I have enumerated?

A. Do you mean do I know what those various costs are?

Q. Yes.

A. Or what they are claimed to be?

Q. Well, do you have any knowledge as to what they are?

A. Well, now, of course not, until a court has passed upon it.

Mr. Stout: Have you any idea what they are claimed to be?

A. Yes; I have, of course, seen the records in the Railroad Commission office of the various appraisals that have

been of these properties.

Q. Well, what appraisals have been made which are in the files of the Railroad Commission covering the properties of the Dallas Gas Company and the County Gas Company at Dallas?

A. I don't know. I haven't seen any such at all.

Q. You haven't seen any such at all?

A. No:

Q. What appraisals are on file in the office of the Railroad Commission covering the Wichita Falls, Corsicana, Denton, Sherman, Hillsboro and Waxahachie plants of the Municipal Gas Company?

A. I don't know. Of course, I know there has been one valuation made by the Commission—I think about 1925—

on Wichita Falls.

Q. About 1925?

A. 1924 or 1925.

[fol. 2978] Q. The property may have changed very decidedly since 1925, may it not?

A. Yes.

Q. Well, have you ever seen in the office of the Railroad Commission — covering the distribution plants of the Texas Cities Gas Company at Waco and Paris, Texas?

A. None at all.

Q. Are you familiar with the earnings, either gross or net, operating expenses and net operating revenues cover-

ing the distributing plants which I have enumerated in these several towns and cities?

A. No, of course, if you mean by that do I carry in my head those figures; obviously not. I know where they can be secured; I have seen them.

Q. You didn't make any tabulation of those figures for

the purpose of testifying in this case?

. A. Oh, no,

#### [fol. 2979] Questions by Mr. Stout:

Q. I believe you stated that you did have some knowledge of the claimed value of a good many of the companies Mr. Griffith asked about, or the reported value by them?

A. No, the only one that I know is the Lone Star Gas

Company.

Q. The Lone Star Gas Company, which is the defendant in this case?

A. Yes.

Q. Have you in your studies and in your experience, made a detailed study of the effect that a reduction has—what effect a reduction in rates has on these kind of commodities, both in the United States and in Canada?

A. I have made two detailed studies, one on transportation rates between 1869 and 1893, and one on the experience in electricity, which runs from 1900 to 1934, the lat-

ter being a much more detailed study.

Q. But you have made studies, of course, generally, and

observed generally all such matters?

A. I have also made such a study, which is not in this field at all of course, on cotton—the effect on takings with the changes in price, and then in general, of course, every economist has to know, obviously, something about the effect of changes in price on consumption and on supply.

[fol. 2980] Q. I will ask you to state whether or not, after the World War, if you did not make a detailed study and a detailed investigation in Washington, D. C., in regard to utilities generally in the United States, with the Federal Trade Commission?

A. Yes, I have been with the Federal Trade Commission

a number of times, not as an official representative, but as a student in the field, studying their records that they have been collecting, notably during the last six years.

Q. And with their permission and approval?

A. Yes.

Q. And you had a desk along with the rest of them, did you not, in those studies?

A. Yes, and access to their files.

# Questions by Mr. Griffith:

Q. This study of transportation rates, which you said included the years 1869 to 1893, did not include natural gas transportation, did it?

A. No.

Q. What kind of transportation are you referring to?

A. I am talking about steam rail transportation.

[fol. 2981] Q. Oh, steam rail transportation?

A. Yes.

Q. Have you ever made any specific studies in relation to the rates now in effect and charged by the major natural gas pipe lines in the United States?

A. No.

Q. Doctor, state whether or not the 32 cent rate, if put into effect, would tend to increase the consumption of gas [fol. 2982] and the volume of gas by the customers of the Lone Star Gas Company?

A. You mean give my opinion on it?

Q. Yes, your opinion.

Mr. Shannon: We object to that question, your Honor, for all the reasons heretofore stated.

The Court: I believe that the Doctor is sufficiently qualified to let him give his opinion as an expert, and that is all he is giving. I will overrule the objection.

Mr. Shannon: Note our exception.

Q. All right; answer the question.

A. I would like to say first that it must of course be my opinion.

Q. Yes, it is all opinion, of course.

A. My opinion is: Yes, it would certainly increase con-

sumption.

Q. Now you have stated, have you not Dr. Montgomery, that you are familiar with the cost of money, the rates of returns generally, the cost of financing and particularly the rate of return as applied to public utilities?

A. Yes.

Q. State in your opinion what would be a fair rate of return per annum on the fair value of its property for a company such as the Lone Star Gas Company would be entitled to earn each year.

Mr. Shannon: We object to that question, if your Honor please, because the witness has not qualified himself to ex-[fol. 2983] press an opinion as to what would be a fair and reasonable rate of return for this company or for companies of this character operating in this general territory at this time.

The Court: Well, Doctor, let me ask you a question.

A. Yes.

The Court: From your studies, in your opinion, do you

feel qualified to answer such a question as an expert?

A. I do, as an expert, if I may be allowed to make explanations as I go along. That is to say, that a man is not qualified as an expert on this particular case here and now, and that of course is not saying anything at all.

The Court: We are talking about such utilities as this.

A. It would be utterly impossible to be so qualified as to this particular case.

Q. What is your answer, please sir, to the question asked you before the objection.

A. In my opinion, that question involves some guess as to what is going to happen in the future, since it is obvious that we can not set for one year a fair rate of return. I should say that a fair rate of return on any property in this year, or in 1933, would be nothing at all.

Q. In other words, they would be lucky to get anything? [fol. 2984] A. They would be lucky to get out alive.

Q. Yes.

A. But, if you are looking, let us say, as far as one might

have the temerity to guess, ten years—my opinion is that five per cent—

Q. Yes sir.

A. Now, that is my opinion and that is not the court's opinion, you understand—that five per cent would be exceedingly liberal.

Q. And that is based upon your life time study in the field of economics and in the field of public utilities and in

these kind of matters?

A. And specifically in the field of the study of the trend of interest rates in this particular economic period.

### [fol. 2985] Mr. Stout:

- Q. I believed you stated that at the present time and for this particular time, almost any rate whatsoever would be a fair rate of return and that the gas company would be fortunate to get it, in view of the present conditions in business in general?
  - A. Yes.
- Q. Now, I hand you here some kind of an exhibit, which I am frank to say I do not understand. By looking at it, can you tell what it shows or purports to show? This is an exhibit introduced by the witness Connor in this case, showing something about the cost of financing as taken from Fitch's Manual—or rather, the cost of bonds.

A. I think I understand what it means.

Q. Fitch's Manual, is a manual that shows the curb prices or rather the quotation price on Wall Street up in those tremendous money centers. Now, would a thing like that show what the over-the-counter price was on transactions—Fitch's Manual, which just represents the Wall Street exchange price?

A. It ought to show approximately the price at which

these securities are sold from day to day.

Q. Does that so reflect the price—that computation there?

A. I think it does.

Q. Have you any explanation to make upon it?

A. Yes, I should think that this indicates not what the effective rate of interest is today, which is certainly one of the major elements to be considered in determining a fair [fol. 2986] rate of return. This indicates rather, I should

think, that the effective interest rate plus the fear of the investor, of these particular securities-in other words, this yield to maturity figure indicates that at a certain price for the bond, they would yield a certain amount of return for the next eight years or ten years or forty years. That is not in any sense an accurate measure of the effective rate of interest that would be expected today by a man investing money in a safe security. In fact it has today of course very little relation to that thing, because this undoubtedly represents primarily the risk involved in such securities as these that are listed. If a man-for instance, the bonds of some of our great railroad companies are selling today for Ten Dollars; they are, I believe, five per cent bonds; that would show a rate of fifty per cent. That surely does not mean that a man who was investing today in a reasonably safe security would expect a return of fifty per cent.

Q. In other words, those calculations show what they get on Wall Street at the Exchange, and not the actual trans-

actions away from there?

A. And I should say that it is of little value in determining—

Q. Little, if any?

A. That is right—little, if any, value in determining the effective interest rate today. That can be shown of course by innumerable figures of offerings of today.

Q. Is money cheaper at this time? Or rather, is there [fol. 2987] more money accessible for a business venture than there has ever been before? Is the interest rate

cheaper than it has ever been before?

A. I believe I should answer both of those questions in the affirmative. That is, there is more free capital for investment today than at any time in the history of the world, insofar as we have records, and under our present form of government today; and that the interest rate is lower.

Q. That is, where they are safe?

A. Yes.

Q. The question was, if your Honor please, that on an investment in a public utility—that is, forgetting about watered stock, but on an investment adequately secured, do

you know of any safer investment in the United States or that has any greater guarantee to it than utility bonds, save with the possible exception of a government bond?

A. I do not. Of course there it is not a matter of having invested in such securities, but I know that the funds of such physical institutions as trust companies and life insurance companies, are larger in such bonds—that is, are invested in those bonds to a greater extent than any other [fol. 2988] major enterprise, as I think they should be. I believe it is the opinion of all financial writers, your Honor, that public utility bonds, if you take the bonds of those whose funds are invested in physical properties, are the best ones in the country—that is, greater security is offered by them.

Q. Now, that computation you have, only shows listed sales as contra-distinguished from sales not there made—that is, at the general markets away from that point, they are not shown at all. Now, do you understand the term of

going value.

A. I understand, I believe, what I mean by going value.

Q. As an intangible, considered only as an intangible, in your opinion does it have any value whatsoever?

A. What was the question?

Q. I asked you whether or not, in your opinion, considering going value as an intangible only, does it have any value?

[fol. 2989] A. In my judgment, absolutely none. I believe that is the judgment of all economists in the field, without any exception so far as I know. I think that is the ruling of the courts, but I don't know.

Mr. Shannon: Your Honor, we ask that be stricken.

The Court: I strike that as to the rulings of the courts;

and the jury will not consider it.

Q. Will you tell me this, Dr. Montgomery; well—that's all. Now, wait just a minute. I will ask you this question. Considered on the theory of speculative fancy of the reproduction new value of this company's property, to know what interest rate it might have to pay, wouldn't you have to know the entire history of the company?

A. I missed that question.

Q. I say, considered on the speculative theory that this

company's property was to be blotted out overnight, just wiped out, and were to be reconstructed again, in order to know what interest rate it would have to pay, wouldn't you have to know the history of it from beginning to end?

A. Your Honor, I still do not quite get the question. If

you mean could I offer an opinion-

Q. Let me put it this way:

The Court: The lawyer should make you understand what he wants.

Q. I will ask you this. In order to know what interest rate this company would have to pay, if any, at this time, [fol. 2990] wouldn't you have to know the history of it and its present standing, in order to accurately determine that interest rate?

A. It seems to me that the question has a contradiction in it; that is what bothers me. If you mean you would have to know the history of this particular company in order to know what interest rate another company would have to pay—

Q. No, I want to know the interest rate it would have to

pay. In order to know that?

A. Certainly—its credit rating would certainly be an important factor in determining the interest rate it would have to pay for current or for new capital.

Q. That is all.

Mr. Shannon: Your Honor, at this time, we ask that the testimony of the witness, with respect to what he terms to be a fair rate of return at this time, be stricken from the record and the jury be instructed that they are not to consider it, for the reason and because the Railroad Commission of Texas has stated in its opinion that six per cent is the minimum rate of return to which the company should be entitled, and I think the plaintiffs in this case are estopped to go beyond that in this case.

The Court: In ruling on that objection or motion, don't overlook the fact that I have already stricken a good deal of his testimony as to the rate of return, particularly as to the

future.

Mr. Shannon: Yes.

[fol. 2991]. The Court: Your objection as to the balance of his testimony will be overruled.

Mr. Shannon: Note our exception.

#### Cross-examination.

#### Questions by Mr. Griffith:

Q. Dr. Montgomery, you are an advocate of government control of utilities, are you not?

A. Yes, to some extent, but as to what extent, I could not

say because I am not familiar with all of them.

Q. All that you are acquainted with, you are in favor of the government taking them over and operating them, are you not?

A. No, I am not.

Q. As a matter of fact, haven't you persistently and continuously been an advocate of municipal ownership of public utilities?

A. I have not.

Q. You have lectured a great deal over the State of Texas, before civic bodies and other organizations, have you not Doctor?

A. Yes.

Q. Wouldn't it be a fair characterization of those lectures to say that in so far as they related to public utility matters, that they were violently anti-utility?

A. You mean anti-private utility?

Q. Yes.

A. By that you mean that I do not wish to do justice to investors in public utility plants. Certainly not.

Q. That has not been your attitude?

[fol. 2992] A. Certainly not.

Q. Now, what is the cheapest money that a public utility can obtain, under any capital structure?

A. It should be on their best form of bond.

Q. Would that be the first mortgage bonds?

- A. It might be and might not. In the case of a railroad, it happens that it is not.
- Q. In the case of utilities generally, is it true that the money obtained on first mortgage bonds is the cheapest money that can be obtained?

A. As a general proposition, I should say so.

- Q. Now, what is the next cheapest money that a utility can obtain?
- A. It should be, in so far as it is a matter—and this is obviously the point of the question—of the risk involved in the security, it should be the next junior bonds issued.

Q. And if there were no next junior bond issue, would not the next money be obtained through the sale, or rather through the issuance and sale of preferred stock or preference shares?

A: It should be.

Q. And what would be the next cheapest money which the utility could obtain?

A. If you mean to list the great groups of securities, bonds, first, preferred stocks and then classified common and then unclassified common, I should think it would be—

[fol. 2993] Q. Do you know what the cheapest money is that the Lone Star Gas Company procures?

A. No, I do not.

Q. Do you know what has been the cost to the Lone Star Gas Company of the cheapest money that it has been able to secure over a period of a number of years past?

A. No, I don't.

Q. Now, you spoke of trust companies investing in the bonds of public utility enterprises. Can you refer me to trust companies which have invested their funds in the bonds of natural gas producing and pipe line enterprises, similar in all essential respects, to the property and business of the Lone Star Gas Company?

[fol. 2994] A. I can not, because I don't know and I am quite certain that there does not exist another property

exactly like Lone Star Gas Company.

Q. Did you ever hear of the Cities Service Gas Company?

A. Yes.

Q. Where does it operate?

- A. It operates in a great number of states. Of course, I have here charts, showing where it operates, but I do not, of course off-hand, know all of the communities.
- Q. Did you ever hear of the Arkansas Natural Gas Company?

A. I don't know it at all.

Q. Did you ever hear of the Southern Natural Gas Company?

A. I have heard only the name.

Q. Do you know where it operates?

A. No

- Q. Can you tell this jury the name of six major natural gas producing and pipe line companies operating in the United States?
  - A. Do you mean exclusively natural gas?
  - Q. Yes.
- A. No, I can not. I rather doubt that there are six major natural gas companies, pipe line companies, if by major you mean of a size comparable to the Lone Star Gas Company.
  - Q. Yes, or half its size or twice its size.
  - A. No.
- Q. Do you know what the current cost of money now is to natural gas producing and pipe line companies, similar in all essential respects to the property and business of the [fol. 2995] Lone Star Gas company?
- A. I do not. I doubt if it would be possible to answer that question, because there has been so little financing during the past two or three years.
- Q. Well, do you know what the current—or do you know what the coupon rate has been on natural gas producing and pipe line bonds issued over a period of the last four or five years?
- A. No.
- Q. Don't you know, Doctor Montgomery, that it would be substantially in excess of the five per cent that you mentioned?
- A. I mentioned five per cent, as I explained, for the present, and the conditions of the future and not 1928 and 1929 which is obviously taken into your five year consideration.
- Q. Well, make it three years. Are you able to tell, Doctor, the current cost of money to any natural gas utility?
  - A. No.
- Q. Whether it is a producing or pipe line company or natural gas distributing company, operating in Texas, or any place in the world?
- A. Such a calculation depends so much on the specific requirements of that utility, its past financial history and its present credit rating, that I think it would be impossible to make a general statement.
  - Q. Will you read my question, please

(Thereupon the following question was read to the witness: "Are you able to tell, Doctor, the current cost of [fol. 2996] money to any natural gas utility, whether it is a

producing or pipe line company or natural gas distributing company, operating in Texas or any place in the world?")

Mr. Stout: Now read the answer, please?

(Thereupon, the following answer of the witness was read: "Such a calculation depends so much on the specific requirements of that utility, its past financial history and its present credit rating, that I think it would be impossible to make a general statement.")

Mr. Griffith: I think the witness has not answered the question.

Mr. Stout: I think he did.

The Court: Let the jury decide whether he did or not.

Q. I will ask him again: Doctor, are you able to tell me, and to tell this jury, the current cost of money to any natural gas utility operating in the United States?

A. I can only give my opinion in the case. I can tell you approximately what the real interest rate is. means the interest rate on long term investments, where there is very little rish of losing the money you invest. Now, you understand that as to the interest rate in any specific case, involving a certain corporation or a farm or a grocery store, that the lender of the money would have to take into consideration the chance of losing his capital. The real interest rate in the United States, is certainly as low as two per cent today, as shown by the fact that the federal government can issue bonds today at slightly [fol. 2997] over two per cent, and get offers for ten times as many bonds as they offer for sale at that figure. Now, that does not mean that you can borrow money on your farm or your grocery store or public utility plant at two per cent; but it does mean that that is the basic rate. that would have to be added the risk involved in that particular case.

[fol. 2998] Q. Are you through with your answer now, sir?

Q. Are you through with your answer now, sir?

A. Yes—just one moment, not yet. May I say this, too,—there are other elements obviously entering into the interest rate, other than the risk involved. We usually list taxes and the costs of making the loan and the risk as the three elements involved in setting the effective interest rate,

other than the true interest rate as represented by United States bonds.

The Court: Pardon me, Doctor, I don't believe you understood the question.

The Witness: I beg your pardon.

Mr. Griffith: We move to strike the answer as not being

responsive to the question.

The Court: Let's let him understand the question. I don't believe Doctor Montgomery understood the question.

The Witness: All right.

Mr. Griffith: Well, we move to strike his answer as not being responsive to the question asked, and ask that the

jury be instructed not to consider it.

The Court: I sustain the motion. The answer is not responsive, and the jury is instructed not to consider the [fol. 2999) answer made as an answer to the question asked.

Mr. Griffith: Now, will you read the question.

(Thereupon the Reporter read the question, as follows: "Q. Doctor, are you able to tell this jury the current cost of money to any natural gas utility operating in the United States?")

The Court: Now, that is just any natural gas company—do you know of any, and if so, give the current rate of interest for any company.

A. No.

Mr. Griffith: That is all.

The Witness: I am sorry I misunderstood your question. I understood your question to apply to—to be, what would the rate probably have to be to attract capital into such an industry.

Direct examination.

### Questions by Mr. Stout:

Q. If you were computing the interest rate, Doctor, how

would you compute it?

A. I should—one effective device would be to see in the past what the interest rates have been to such companies as this, or to this one specifically.

[fol. 3000] Q. Yes, sir,

A. And compare that with the true interest rate, which,

as nearly as we can estimate to-day, is the interest rate on United States Government bonds that are tax exempt; and then I should take the United States Government credit to-day and make my computation from that.

Q. Yes, sir.

A. Understanding that that would not apply as against the risk involved in one particular case, but as a general statement for the rate that would necessarily have to be paid in such industries.

Q. Mr. Griffith asked—or, rather, isn't the true interest rate in the United States to-day lower than it has been for

many, many years?

A. Yes.

[fol. 3001] Mr. Stout: Well, my question, substantially, was that Mr. Griffith asked him a good many questions about the financial workings of the gas industry, and from his last study, or a study of a great many years, and his investigations, and his experience with the Federal Trade Commission, was it not a hard task to find out the answers to the questions asked by counsel, Mr. Griffith.

[fol. 3002] A. Yes.

Q. Now, you spoke of the interest of the Federal Reserve Bank. That, of course, is on secured loans, is it not—the interest rate you were speaking about?

A. The interest rate I spoke about was on Government

bonds.

Q. Yes, sir.

A. Which are, presumably, as secure as any type of credit instrument that we have.

- Q. Isn't the interest rate of the Federal Reserve Bank now at this time on secured loans cheaper than it ever has been before?
- A. As far as I know, it is cheaper than it has ever been before.
  - Q. Yes, sir.

A. It is approximately one-third of what it was during the twenties.

[fol. 3003] Q. Would that indicate that there is more money available for safe investments than there has been perhaps in your lifetime and mine?

A. There is no question on that score whatever; there

is more,

Q. Yes, sir. Now, the testimony shows, Doctor Montgomery, in this case that the Lone Star Gas Company has executed a note—an unsecured, plain promissory note in the amount of \$17,500,000.00 to the Lone Star Gas Corporation, the parent company, of Delaware; the interest rate on that loan is six per cent interest.

[fol. 3004] Q. In any event where the money is obtained directly, there being no other indebtedness whatsoever on a company claiming a value of around seventy million dollars, which is valued by the State at around some thirty-nine or forty million dollars, and that being the debt—an unsecured note of \$17,500,000.00,—in your opinion as an economist and as an expert, could a lower interest rate be secured if it were done by first bond mortgages, like Mr. Griffith interrogated you about?

[fol. 3005] A. In my opinion, it should be secured to-day—if you mean that.

Q. Yes, sir.

A. It should be secured to-day at a much lower rate than that.

The Court: Than what?

A. Than six per cent. In view of the fact that I noted in my paper I got to-day—The Business Week—that one of the large companies has just refunded its five per cent first mortgage bonds—it is not a natural gas company, it [fols. 3006-3007] is a public utility company—with a three per cent issue.

Q. With a three per cent issue?

A. Three per cent.

Q. As a general proposition, is it a simple statement of a plain fact that a secured loan can get cheaper interest than one unsecured or a plain promissory note?

A. Yes.

Q. For the same company?

A. I understand, and under the same conditions.

#### Recross-examination.

#### Questions by Mr. Griffith:

Q. Doctor Montgomery, the fact that the Federal Government is able to obtain money at two per cent is very little consolation to you and to me and to other- who have to borrow money and pay from six to ten per cent, is it not?

A. I do not borrow at present at from six to ten per cent. If you mean that it does not indicate a surplus of capital funds ready for investment in safe securities, then, of course, my answer is No.

[fol. 3008] S. W. Freese, a witness for plaintiffs, recalled, testified as follows:

Direct examination.

# Questions by Mr. Fitzhugh:

- Q. Mr. Freese, in your experience as an engineer have you during the years of your experience made studies of the wearing out of pipe and materials in service?
  - A. Yes.
- Q. Have you noted from your general experience the exhaustion of machines and machinery, and the moving parts of machines and machinery, due to their wearing out in service?
  - A. Yes.
- Q. Have you during the time you have been working on the investigation of the Lone Star Gas Company made a study, or caused assistants working under you to make studies and to get data and material from the books of the Company in Dallas?
- A. Yes; I have studied in detail the charges to the depreciation reserve of Lone Star Gas Company as furnished to me by the auditors, and also the history of replacements [fol. 3009] to the various units and classifications of property, and have also made a detail of the pipe mortalities in the Lone Star Gas system as reflected by its history from the very beginning.
- Q. From your study of the charges made and the replacements, do you understand the charges that the company used in making those replacements?

A. Yes.

Q. Do you understand how the Company takes care of replacement being made currently to its system?

A. Yes.

Q. Do you understand how it handles the matter of pipe mortality and replacements?

A. Yes.

Q. Have you in your study and analysis of the actual experience of the Company made curves and graphs showing the mortality of pipe, and showing replacements, and so forth?

A. I have.

Q. Have you prepared for introduction in this cause an exhibit showing the estimates of the annual amounts necessary to take care of the wearing out of the Company's property, obsolescence, and so forth, generally known as annual depreciation allowances?

A. Yes.

Q. Will you produce your exhibit?

A. Yes.

[fol. 3010] Q. This exhibit is entitled "Lone Star Gas Company, Texas Gathering, Transmission, Compressing and General Property, Annual Depreciation June 15, 1934. Hawley, Freese and Nichols"?

A. That is correct.

Mr. Fitzhugh: We introduce this exhibit in evidence.

(Thereupon the exhibit above referred to was marked for identification as Plaintiffs' Exhibit No. 7.)

The Court: Have you any objection, Mr. Griffith?

Mr. Griffith: I would like to ask a few questions.

The Court: All right.

## Examination by Mr. Griffith:

Q. Mr. Freese, the exhibit just tendered in evidence purports to relate to the annual depreciation allowances in connection with the property purported to be evaluated in Plaintiffs' Exhibit 6, does it not?

A. Yes; I have made application of the annual rates to

the property evaluated by us in our Exhibit 6.

Q. The calculations in regard to annual renewal rates and annual depreciation allowances are upon the so-called [fol. 3011] sinking-fund method, are they not?

- A. That is correct.
- Q. The sinking fund method of accruing depreciation allowances presupposes the use of an undepreciated rate base, does it not?
  - A. That is correct.
- Q. What is the method actually used by the Company in connection with its accrual of depreciation allowances?

Mr. Fitzhugh: You mean your exhibits?

Mr. Griffith: No; as actually used by the Company on its books.

- A. Well, they set up on their books each year a certain allowance for depreciation and they make certain charges to that reserve. Now, those are not labeled by any particular label. They just set aside certain amounts to depreciation reserves and they make certain charges.
- Q. As a matter of fact, don't you know, Mr. Freese, that the accruals made by the Company are upon the straight-line method?
- A. I think that is true, in general. However, in some years you set aside very little to the depreciation reserves, and some years you set aside a larger amount to the depreciation reserves.
- Q. In determining your annual depreciation allowances, as summarized on page 1 of the exhibit just tendered, do you base those depreciation allowances upon the use of any [fol. 3012] credit balances existing in the Company's depreciation reserve account?
  - A. No; we do not.
- Q. As a matter of fact, in connection with your allowance for depreciation on that Transmission System Property do you not presuppose the use of a credit balance in the depreciation reserve account in the approximate amount of five million dollars?
- A. No; we do not presuppose, or have not taken into consideration the specific amount set aside by the Company. What we did do—or rather the result of this method, if applied by the Company is that they would have set aside whatever the proper amount would have been; whether they have or have not set aside the proper amount does not affect this study one way or the other.
- Q. Have you assumed that there are certain credit balances in the depreciation reserve account in the computa-

tion of your annual depreciation allowances as summarized

on your page 1 of the exhibit just tendered?

A. Well, I have assumed that during the life of say Transmission Line Equipment, that as the service life expires the proper amounts would be set aside each year, and that the proper amount has been set aside in accordance with the expired service life of the transmission line equipment.

[fol. 3013] Direct examination continued.

#### Questions by Mr. Fitzhugh:

Q. The first sheet inside the title sheet is a table of Contents?

[fol. 3014] A. Yes, sir.

Q. What do you show on Sheet 1?

A. Sheet 1 shows a summary of the Annual Depreciation Allowance. It also makes application to the reproduction Cost New of the items which should carry an annual depreciation allowance of the annual rate as set out in detail for each item in the succeeding pages of the report, the total Annual Depreciation Allowance being \$831,946.08 per annu-. The reproduction cost new figures, as shown in the first figure column are taken from the reproduction cost new exhibit which has been previously introduced. The Annual Rate shown in the next figure column reflects the detail figures given in the body of the report. The product of the annual rate and the Reproduction Cost New—and that annual rate is the per cent of the Reproduction Cost New—gives the annual amount, as shown in the figure column on the right.

Mr. Griffith: When you say "reproduction cost new, you mean the reproduction cost new as determined by you and as set out in Plaintiff's Exhibit 6?

A. Yes; as set out in Exhibit 6.

Mr. Griffith: And that is true of each and every item appearing under the iteam headed "Reproduction Cost-New" on page 1 of Plaintiff's Exhibit 7?

A. Yes.

[fol. 3015] Q. Now, Mr. Freese, you say you have used for the computation of your annual depreciation allowance the sinking fund method?

A. That is correct.

Q. There is another method of finding depreciation known as the straight-line method, is there not?

A. That is true, yes.

Q. Can you explain, in a general way, so the jury may understand, what the difference is between these two

methods of finding depreciation?

A. We will take for example one of the Company's cottages, which is estimated to have a life of twenty years. Suppose that it has an actual life of twenty years. Then by the straight line method five per cent would be set aside each year by the Company to take care of the costs of that cottage at the end of its life. In other words, assume that it went out of existence in the twentieth year, and they would have set aside five per cent each year for the twenty years, and they would have had one hundred per cent of the value of that property set aside at the twentieth year; that five per cent per annum would have been taken by the Company and used as it saw fit. By what we call the sinking fund method of depreciation they set aside each year an amount which, with the interest on what has been set aside, at the end of the twenty years amounts to one hundred per cent of the value of that property. '

[fol. 3016] Q. There is no difference, is there, Mr. Freese, as to whether you use the sinking fund method or the straight-line method, each method, if properly applied, will

bring you out at exactly the same place, will it not?

A. That is co. rect.

Q. Now, suppose you start on the detail sheets following your summary page, turning first to page 2, and state what

you show on that page.

A. The first item is Gathering System Rights of Way. There are no replacements, of course, to rights of way. Now, we have estimated that the average life of the Gathering System Rights of Way is 13 years. Now, 5.296 per cent of the cost of those rights of way set aside annually, with an allowance of 6 per cent interest on the amount set aside, will equal one hundred per cent of the cost of those rights of way in 13 years. Such an allowance of 5.296 per cent per annum will accumulate in 13 years to 100 per cent of the cost of those rights of way, and the Company would receive at the end of the average life of these rights of way a return of 100 per cent of the investment in those rights of way. The next item is Field Measuring Station Structures, amortization of 100 per cent in 13 years. These field measuring

station structures are small houses which, when they reach the end of their usefulness in the field, are generally picked up and put on a truck and carried to some other location. [fol. 3017] They are just small houses which can be picked up and put on a truck and carried to some other location. However, we have allowed for the complete amortization of 100 per cent of those costs at the end of the average life of the field measuring station structures. If there be any salvage value in those structures at the end of the 13 years the Company will gain the benefit of that salvage value. The cost of making all current replacements to field measuring station structures have been, and are being charged to Maintenance accounts as part of the operating expenses. Now, if that continues to be so, and so far as we are concerned it does not make any difference whether it continues to be so or not—as long as they are charging to present operating expenses all maintenance of these field measuring station structures, why they could keep on just as long as the Company lasted or had any use for these field measuring station structures, if they kept them maintained in good condition, the only loss to the Company would be the cost of moving them from place to place. However, whenever one of the major fields is abandoned, they would probably lose one hundred per cent of the cost of those structures, and that has been provided for each thirteen years: Now, when it comes to Field Measuring Station Equipment, the cost of keeping this equipment up, which consists largely of meters, is also charged to the maintenance accounts as part [fol. 3018] of annual operating expenses. We have allowed for the setting up of a fund which, at the end of the estimated average life of 13 years, will equal 70 per cent of the costs of the field measuring station equipment, it having been estimated that 70 per cent of the costs of these meters will be lost upon the removal from one site to another site, but the 13 per cent—or rather the percentage allowed per. annum will in 13 years amount to the 70 per cent loss which would be incurred upon their removal. Current replacements in this case are also charged to operating expenses. and so far as this allowance is concerned, should not enter into these figures.

Q. Now, under Field Line Equipment, you show a table, showing a column for the year, a column for replacements, a column for annual rate or per cent, and a column for amor-

tization fund per cent. Explain that table.

A. At the bottom of the right-hand column is found a figare, 88.5 per cent. This 88 per cent is estimated to be the loss, taking into consideration the cost of making the removal-taking into consideration the salvage value of the pipe, the 88 per cent will be the losses at the end of the average life of this Field Line Equipment, which is estimated to be 13 years. In the column headed "Replacements," which is in increasing amounts up to the thirteenth year, is given the percentage which it is estimated will be [fol. 3019] required for each of those years to make the replacements due to the wearing out of the pipe in service. Now, the figures for the replacements during each of the thirteen year estimated life of field line equipment are taken from the tables shown on pages 9 and 10 of Exhibit 7, and this table conforms to the mortality curve and distribution curve of replacements and abandonments on pipe as shown on page 11 of this exhibit. The per cent, or rather the annual rate percentage required each year to make all replacements in the field line equipment and to build up this. fund which will take care of the total losses of 88 per cent at the end of 13 years is 5.085 per cent. That has been given as an even amount for each year, and has been carried back. to the sheet shown on page 1. In other words, that rate of 5.085 will make all replacements and will take care of the total losses involved at the end of the average life of the property.

[fol. 3020] Q. Proceeding on page 3, the next item is Transmission System Measuring Station Leaseholds?

A. Yes. There we have set up a figure of \$401.31. That is the annual lease accrual—in other words, that sum of money each year will at the end of the life of the leaseholds have completely paid off the value of the leaseholds. Similarly, for Other Transmission System Leaseholds, the lease accruals amount to \$71.68 per annum; that is the actual accruals on these leaseholds. That covers the accruals on both Texas and Oklahoma. There would be a slight credit by eliminating the Oklahoma leaseholds, but it would be very small. The next item is Transmission System Rights of Way. This covers the rights of way on the main lines, estimated to have a value of \$899,090.73. We have amortized 100 per cent of the cost of those rights of way over a period of fifty years. Some ten to fifteen years of the

life of these rights of way have already elapsed. as to whether at the end of thirty-five years these rights of way will still be used for the transportation of gas or not, I am unable to say. However, I am of the opinion that these rights of way will be useful for at least another thirtyfive years, and we have amortized the cost of these rights of way 100 per cent over that lifetime. The next item is Transmission System Measuring Station Structures. We . have allowed for an amortization of 100 per cent of the value of these structures in twenty-five years. [fol. 3021] the current replacements and repairs, such as painting and similar repairs, are being charged to operating expenses by the company. However, once in a while there is what might be called a major rehabilitation of one of these Transmission System Measuring Station Structures, and that is charged to depreciation reserve. However, we could not divide very well between these charges to Transmission System Measuring Station Structures and similar charges to the Equipment, so we have made an allowance under the head of Transmission System Measuring Station Equipment covering all such rehabilitation charges which are being charged to depreciation reserve. The estimate of life of these Transmission System Station Structures of twenty-five years—that is, the allowance of amortization of 100 per cent in twenty-five years-is probably liberal because of the fact that those structures are maintained in excellent condition from year to year, and if any replacements are required those replacements are made out of operating expenses. There is no reason why those structures should not last as long as the property itself lasts. The next item is Transmission System Meas. uring Station Equipment. This equipment consists largely of meters, or, rather, that is the biggest item-meters and regulator equipment in these stations. It is maintained in perfect condition at all times, well painted. However, we have figured on an amortization of 100 per cent of the cost of this equipment in forty years. We have also allowed for current replacements in the amount of 1.332 per cent This covers current replacements also to the [fol. 3022] structures themselves where such replacements have been made out of the depreciation reserve. In 1927 the actual charges to the depreciation reserve by reason of current replacements to either Transmission System Measuring Station Structures or Equipment was \$2,088.63;

for 1928, \$2100.59. As of that date, or between the accounting periods 1928 and 1929, the company changed its policy with reference to making charges to depreciation reserve, and that year the charges jumped to \$7,548.19—that is, from the \$2,088.63 and \$2100.59. In 1930 it was \$7115.94; the next year it was \$3577.98. We took the average for the three heavy years and did not include the years 1927 and 1928. This resulted in a percentage of 1.332 per cent per annum for current replacements. Now, I checked that figure against the actual charges made to the depreciation reserve in 1933, and find that the allowance was more than sufficient to take care of such charges during the last year examined, 1933. The next item of property is the big item, Transmission Line Equipment.

Q. Starting out on page 4?

A. Starting out on page 4. Transmission Line Equipment has been divided into main lines, tap lines and gathering lines, and the weighted average for annual rate for this item is 2.183 per cent per annum, which, when applied to the \$27,052,546.81, gives an annual amount of \$590,557.10. That is almost two-thirds of the total annual depreciation allowance. As shown on page 4, for main lines, the second column gives the percentage of replacements for each year; [fol. 3023] in other words, starting out with the first year, the replacements would be quite small; ending up with the forty-fifth year-that is what we have taken as the cycle for Transmission Line Equipment-it ends with 3.46 per cent per annum. However, we have started out with an annual rate of 1.70 per cent and have carried that through the entire life cycle of this particular piece of property. That 1.70 per cent is sufficient to not only make the necessary amount of annual replacements, but is sufficient to build up a reserve fund of 101.51 per cent of the cost of the property during the life cycle of the property. this annual amount of 1.70 percentage, sufficient to both make replacements and amortize 100 per cent the cost of the property during its lifetime, we have added a percentage of .289 per cent to make major removals and .150 per cent to make major rehabilitations, giving a total of 2.139 per cent per annum. There is very little regularity about the way these major removals took place. The heavier removals were in the early history of the company, when there was a comparatively small amount of pipe in the sys-However, the total of major removals during the

history of the company up through 1931 was 659 miles of

three-inch equivalent pipe.

Ifol. 30241 Now the percentage relation of those major removals to the total amount of pipe in the system as of December 31, 1931, was 8.54 per cent, and the ratio would be substantially the same today. The loss incurred in these major removals is 74.51 per cent. Therefore the average loss during the history of the company for these major removals has been .289 per cent. That is, over the history of the company, of twenty-two years up to December 31, 1931. The history of the company; that is, the fact that these major removals came during the early history of the company, you might say, when the company was getting settled, might be called growing pains, indicates that there should not be any great increase in the future in this item.

We have also allowed for major rehabilitations in the amount of .150 per cent. That was the amount testified to by the company in the hearing before the Railroad Commission as being the actual amount incurred in the past history of the company, although they did raise that amount to .20 per cent, as a matter of taking care of what they esti-

mated would be a future increase in that amount.

Now the main lines amount to 69.58 per cent of the total cost of transmission line equipment. That, multiplied by 2.139 per cent for the main lines, gives a weighted percent-

age for the main lines of 1.488 per cent.

The next division of transmission line equipment is tap lines. The annual allowance for tap lines of 1.989 per cent [fol. 3025] was computed in a manner similar to that for main lines, except that there have been no major rehabilitations on tap lines, and we have only included the annual rate necessary for all replacements and for complete amortization, plus the item of major removals. In this case the amortization fund amounts to 101.51 per cent. That shows here as 100.51 per cent, but it should be corrected to read 101.51 per cent. Tap lines amount to 18.91 per cent of the total cost of transmission line equipment, and multiplying this 18.91 per cent times the annual rate found of 1.989 per cent, covering the tap lines, gives the weighted per cent as part of transmission line equipment of .376 per cent.

Gathering lines have been found as follows: An annual amount has been set up which would not only take care of annual replacements but at the end of a twenty-year esti-

mated life of these gathering lines, would provide a fund of 76.982 per cent, which is sufficient to take care of the loss incurred when these lines are taken up at the end of the average life of twenty years and moved to a new location. No allowance has been made for major removals, in as much as this allowance of 76 per cent is designed to take care of what would constitute major removals on gathering lines. Nor is the item of major rehabilitations incurred on gathering lines. Applying the rate of 2.770 per cent found for gathering lines to the percentage of gathering lines in the transmission line equipment, or 11.51 per cent, we get a weighted average, or rather, the part applicable to gath-[fol. 3026] ering lines, as part of the weighted average for the whole item of transmission line equipment, is .319 per cent.

Now, adding together the weighted amounts found, for the main lines of 1.488 per cent; for tap lines of .376 per cent and for gathering lines of .319 per cent, we have a total of 2.183 per cent, covering transmission line equipment.

Now, the reple ements as shown in each of the tables covering the three divisions of transmission line equipment, that is the percentages for replacements have been taken from the tables on pages 9 and 10, which show the calculation of the total annual renewal rates, including replacements of replacements. Now that total in turn is taken from the mortality curve, and the distribution curve of replacements and abandonments shown on sheet 11.

Now the test as to whether the tables and the mortality curve which have been used throughout this exhibit are correct or not, is shown on page 12. On page 12 it shows the calculated replacements and abandonments as used by me throughout this exhibit. The black heavy verticle lines show the actual replacements as experienced by the company. The year 1933 has not been plotted on this curve, but it would be considerably less than the amount which I originally estimated for the year 1933. The year 1932 was only some one-tenth of the amount estimated by me for the year 1932.

Another test of the reasonableness of those tables and [fol. 3027] the curves which have been used throughout this exhibit is the company's experience on the two oldest lines in the system of the company, being Lines B and C, which were laid in 1910 and 1911. The actual mortalities on Lines

B and C in twenty-one years, amounted to 9 per cent. The mortalities which would have been incurred, according to the tables and curve which I have used throughout this exhibit for pipe, would have been twenty per cent, as compared to the nine per cent actually incurred. I believe, Mr. Fitzhugh, that covers the transmission line equipment.

Q. The next item is that of compressing stations, appearing on page 7. Will you explain your per cents shown

there?

A. We have divided the item of property, compressing stations, into two main divisions: main line stations, which are the Petrolia and Joshua stations, and the field stations which are all of the other stations scattered through the fields of the company.

Mr. Griffith: What did you do with the Gainesville sta-

tion?

A. We have taken the Gainesville station as a field station, subject to the same possibility of major removals as the field stations, the stations which I have included in main line stations being Petrolia and Joshua. The property at each one of these stations has been broken up into the divisions to which the different annual rates would be applicable, and for example it has been divided into land and [fol. 3028] improvements, leaseholds, joint property, class A structures, Class B structures, main units, and so on. The annual average life for each one of these different divisions has been estimated, and for each division there has been set up an annual rate which would completely-or which would provide completely a fund which would take care of 100 per cent of the cost of that particular division during the estimated life of the property. In addition to that, for both main line stations and field stations we show an allowance for current replacements, in the one case of .392 per cent for main line stations and for field stations of .413 per cent. In checking over these figures, I find that that allowance should be incureased by 4/10 per cent per annum, which will amount to approximately \$16,000 per annum for this item of property. These current replacements are based upon the current replacements, actually experienced by the company.

[fol. 3029] Q. Had you finished your explanation of the compressing station rates as shown on page 7?

A. No; I had not.

Q. Will you explain that at this time?

A. I was explaining the matter of current replacements which I feel should be increased by .4 per cent over what I have shown here, or in the amount of approximately \$16,000 per annu-. The charges for current replacements made to depreciation reserves for compressing stations during 1927 were \$10,460.83; 1928, \$6,559.69. Then at that time the Company changed its policy of making these charges, so in 1929, these charges jumped up to \$41,709.60; 1930, \$42,775.20; 1931, \$37,049.56; or an average for the three years of \$40,511.45; and the figure, after I make the [fol. 3030] correction of .4 per cent is sufficient to take care of those charges. Now, in checking the 1933 charges against that annual amount for replacements, I find that that would be sufficient for the year 1933 also. That gives us a total for main line stations of 2.571 per cent. Now, field stations were computed in an exactly similar manner, except that an additional allowance has been made for removals and abandonments of these field stations, and I have used for that 1.360 per cent. The Company estimated in the hearing before the Railroad Commission that that allowance should be 1.240 per cent. That was based on a 7 per cent sinking fund basis. The Railroad Commission changed that to a 6 per cent sinking fund basis, and increased it to 1.360 per cent. That allowance on a 6 per cent sinking fund basis is sufficient to take care of all major removals and abandonments. Now, there is some measure of duplication in these three allowances. We have, first, the current replacements and repairs. We have, second, an allowance which will take care of the complete replacement of these units over their natural life; and then we have a third allowance in the case of field stations, which will take care of the removal or or the loss when one of these stations is moved to another loca-Take, for example, main compressor units. Out of this allowance for current repairs and replacements, for [fol. 3031] example, one of the items that enters into that is cracked bed plates. In other words, this fund is sufficient to put in entire new bed plates. Another big charge is cylinders, like particularly at the Petrolia Station-new cylinders in the compressor engines. If that process was

kept on, and the replacement of these worn out units charged to operating expenses, that would keep those engines going indefinitely. Now, take for example this item of water supply or auxiliary units, for example-we have allowed for complete amortization by reason of the depreciation of these units in twenty years. We will suppose, for example, that the whole station was removed in twenty years, then we would have a fund in there to take care of the loss by reason of that removal. There is a certain amount of duplication there that cannot be avoided and work out definite figures for each one of those items. For that reason I feel that the figure is safe. As applied to the one item of auxiliary units, for which we have allowed a 20-year life, supposing that the station had a 20-year life, well, out of the replacements would come repairs to those auxiliary units; out of the replacement fund would come sufficient to amortize the whole cost of the property in twenty years; and out of the charges for removals and abandonments there would be a sufficient amount to remove the equipment to a new station and put it in new condition. That completes the explanation of the rate as applied to compressing stations.

[fol. 3032] Q. The next item at the top of page 8 is General Office Structure. Explain the rate that you use in connection with it.

A. We have provided for current replacements and repairs to the structure, not charged to operating expenses, .750 per cent. Elevator repairs, and such as that, have been charged to depreciation reserve; and this percentage of .750 is sufficient to take care of such replacements as have been charged to that reserve. That provides about \$2400 per year. For the year 1933 the actual charges to that reserve were \$29.65. Of course, that was a very low figure, and some years they would go more than that,—possibly more than the \$2400 we have allowed; and we have also allowed for the complete refund, which will equal 100 per cent of the cost of the building over a period of 40 years. Part of that life, of course, has already elapsed.

For Other General Structures we have allowed for the setting up of a fund which will amount to 100 per cent in 25 years. All repairs and replacements to Other General Structures have been charged to Operating Expenses, and were being charged during the accounting periods which are

being considered in this case. With reference to General Office Furniture and Fixtures and Other General Furniture and Fixtures, those have been divided up into the different classifications, such as furniture and Fixtures, Machine [fol. 3033] equipment, Law library, draperies, rugs, and Dictographs, and the life for each class has been estimated, and a fund set up which will take care of the complete replacement of that property over the life of the property. In this case also, all repairs to this furniture and fixtures, and such as that, have been charged to operating expenses and are included in the operating expenses as set up by Mr. Phillips and by the Company's witness.

General Shop Equipment, we have allowed for a fund, which will equal 100 per cent of the cost of this equipment in 15 years. In that case, current replacements and repairs

were charged to operating expenses.

With reference to General Telephone System, we have allowed for the replacement of that property completely in 40 years, and have set aside for current replacements .402 per cent. There is some question whether this allowance of .402 per cent should be made or not, as practically all telephone replacements and repairs are being charged to operating expenses. There were no repairs or replacements charged to that fund during the year 1933.

Now, for all of the Non-Physical Property we have allowed for a fund—by non-physical property, I mean administration and legal expenses, \$687,000; engineering supervision, \$1,700,000; taxes during construction, \$8500; interest during construction, \$1,522,000. We have set up [fol. 3034] a fund such that the annual increments will equal 100 per cent of the appraised value of this non-physical property at the end of 50 years, part of which 50 years has already transpired.

Q. You have already referred to pages 9 and 10, but you have not made a detailed explanation of those pages. Perhaps you had better do that at this time.

A. Pages 9 and 10 simply show the calculation of the total annual renewal rates, including replacements of replacements, as taken from the mortality curve shown on page 11. This mortality curve is for pipe having an average life of 33½ years. The reasonableness of this curve has been tested on page 12 by plotting the calculated mortalities against the actual mortalities incurred by the Company. Up

to the end of 1931 the calculated mortalities were almost identical with the actual mortalities incurred up to that date.

This curve at the bottom of page 11, known as a distribution curve, shows the way that the replacements will come. [fol. 3035] In other words, they start out low; when you get up to about the average life of the pipe they reach a maximum, and then they taper off, as the original units have all disappeared. This tabulation here simply shows for each year the figures taken from that curve, and also the replacements of replacements put on there each year, such that the total at the bottom will be not only the replacements of the original units, but the replacements of the original units that have been replaced—replacements of replacements. Now, this figure here shows a comparison of the calculated curve, which, of course, would be a smooth curve, with the replacements as actually experienced by the Company. Now, the sum total up through 1931 of these calculated replacements equals the sum total of the actual replacements experienced by the Company. Now, the estimate for the year 1932-this was made based on the experience up to 1931—was approximately 60 miles. As a matter of fact, there were incurred only about 6 miles of replacements. Now, for 1933 there - considerably more than there was in 1932; yet for this year the actual mortalities run somewhat less than the calculated mortalities for the year 1933.

Q. Now on that sheet, page 12, for 1931, what is that "J"

portion, and that "C" portion shown there?

A. The "J" portion is the replacements on Line "J", which were due to—that is the pipe that comes out of the [fol. 3036] Joshua Compressor Station, and that replacement was due either to defective pipe, which would not be incurred in the future, or it was due to the nature of the gas that was being put out at the Joshua Station which caused the corrosion of the pipe, or possibly both factors;—That should not recur in the future. Line "C" was the removal of Line "C" made necessary by the rehabilitation of the Dallas County Levees, and that should not be a recurring item in the future. However, the total of these calculated mortalities up to this point is sufficient not only to take care of these regular replacements, but also sufficient to take care of the replacements which occurred on Line "J" and Line "C" in the year 1931.

Q. Where did you get the 33½ year average life that

you used in the finding of your mortality curve?

A. Well, any mortality curve of this sort must be based upon the experience that—in connection with the particular kind of material with which you are dealing—in this case steel pipe. That was worked out similar to practically all symmetrical mortality curves; that is, that the replacements during the latter half of the life of a pipe line will correspond roughly to the replacements during the first half of the life cycle of the pipe; but the whole test of a mortality curve of this sort is the graph shown on page 12, which shows a comparison between the calculated replace-[fol. 3037] ments based on a mortality curve of this sort and the actual replacements that have occurred.

Q. Turning back to your summary sheet on page 1, after applying the rates that you have found in the detail sheets that you have just been explaining to the reproduction cost new as found by you, and already testified to heretofore, you find that the total annual depreciation allowance will be the amount of \$831,946.08; is that correct?

A. That is correct, except for that correction of .4 per cent for replacements on compressing station property. That would be .4 per cent per annum of the \$4,146,111.57, which would be \$16,600.00 approximately. I find in carefully checking back through all my notes that my allowance was not sufficient to take care of those current replacements in that amount.

[fol. 3038] Q. So that, adding the sixteen thousand dollar figure to the total annual allowance which you have found on page 1, you would have the amount which in your estimation is sufficient to take care of all annual depreciation?

A. I think that that would be fair and reasonable to take care of the depreciation—annual depreciation on the property covered by us on this page, particularly in view of the way the Company charges maintenance to operating expenses on a part of these items.

[fol. 3039] F. S. French, a witness for plaintiffs, having been duly sworn, testified as follows:

#### Direct examination.

# Questions by Mr. Fitzhugh:

Q. State your name, please.

A. F. S. French.

Q. Where do you live, Mr. French?

A. Austin.

Q. What is your business?

A. Civil Engineer.

- Q. Are you connected with any of the State departments?
  A. The Gas Utilities Division of the Railroad Commis-
- on.
  Q. How long have you been connected with the Gas Utilities Division of the Railroad Commission?

A. About two years.

Q. Prior to that time in what work were you engaged?

A. Civil Engineer for the City of Amarillo.

Q. Where did you get your education, Mr. French?

A. Ohio State University.

- Q. Did you graduate from that institution? [fol. 3040] A. I do not have a degree, no, sir.
- Q. How long have you been engaged in the practice of Civil Engineering?

A. About thirteen years.

Q. Before coming to the Railroad Commission, where was your home?

A. Amarillo, Texas.

Q. How long did you live there?

A. About six and a half years.

Q. Are you fairly well acquainted with all the Panhandle territory between Amarillo and—that is, at Amarillo and around in Wheeler County and on down as far as Vernon?

A. Yes, sir.

Q. Have you been engaged at any time during your employment with the Railroad Commission in the investigation of a pipe line running from the Wheeler County Field down toward Vernon?

A. Yes, sir.

Q. What is the name of the Company?

A. Northern Texas Utilities Company.

Q. What is the general route taken by the line of the Northern Texas Utilities Company to which you just referred? Can you indicate on the map?

- A. Approximately—one line comes down here (indicat[fol. 3041] ing on map), and then it cuts back to Childress
  and goes to Vernon—it bends at Vernon, and goes into
  Wichita Falls; the other lines y's at Wellington and cuts
  across just one corner of Oklahoma, in approximately the
  same location as the Lone Star Gas Company, and comes
  in at Vernon.
- Q. As indicated on this map, this line starts about the middle of the group of lines shown in Wheeler County on this map, does it not?

A. Yes, sir.

Q. And comes south, cutting about the middle of Collingsworth County, through Wellington, down into Childress County,—is that correct?

A. That is right.

- Q. Through Childress County, how does it run?
- A. It continues on through Childress County-

A. Yes, sir. It continues on through Childress County, running north, right through Kirkland, into Quanah.

Q. Does it pass through the town of Childress, in Chil-

dress County?

A. There is a tap off the main line serving Childress. [fol. 3042] Q. But the main line proper does not go through the town of Childress?

A. No, sir.

Q. The line to which you refer is a route wholly in Texas, is it not?

A. Yes, sir.

Q. And referring to this map again, the line which you have just described, which is the line of the Northern Texas Utilities Company, is a route west and at the lower part—the southern end of the route is slightly south of what is shown on this map as Line A, is it not?

A. That is right.

Q. Where does this line of the Northern Texas Utilities Company take gas to?

A. All-Well, to Texas points, ending at Wichita Falls.

Q. That is, this line receives gas in Wheeler County, does it not—from the Shamrock Field?

A. Yes, sir.

Q. And transports it south towards Wichita Falls and other points in that vicinity?

A. That is right.

Q. What is the size of the line?

A. The line is 16-inch from the Shamrock Field to the Wellington Y; it divides there into two 12-inch lines, and [fol. 3043] picks up at Quanah again as a 16-inch line, and continues on into Wichita Falls on that size pipe.

Q. Now, in making your investigation of this pipe line did you investigate all of the soil conditions through Collingsworth and Childress Counties, on down to or as far

as Vernon?

A. Yes, sir.

Q. At how frequent points did you make your observa-

A. Well, the lines were all classified, and some of them ran ten feet up to a thousand feet; where the classification would change, why, we would get all points where the soil classification would change.

Q. You mean at some points you took observations at

thousand foot intervals?

A. And other places we might run fifteen thousand feet, where the soil was the same; and then on top of that, to recheck the line, we went back and made observations at every mile point, and test holes were dug.

Q. And that's from the Wheeler County Field as far

south as Vernon?

A. Yes, sir.

Q. Would you read a sample of the notes that you made

in taking these observations?

A. From Shamrock to Wellington Y, 16-inch pipe, Sta-[fol. 3044] tion 0-plus-00 to Station 69-plus-43, sandy loam and clay; all machine work. 69-plus-43 to 70-plus-00, 57 feet, red clay and rock, that is 50 per cent solid rock; Station 70-plus-00 to Station 70-plus-23, 123 feet, is 20—that is red clay and rock, 20 per cent loose rock and the other hand earth. Station 70-plus-23 to 71-plus-77, 80 per cent loose rock; 71-plus-77 to 77-plus-00, 223 feet, red clay and small boulders.

Q. The rest of your observations, Mr. French, read along about the same, do they not? That is, you classified hand earth and rock excavation at each observation point?

A. Yes, sir.

Q. Now, at each observation point that you have listed, a hole was dug?

A. Not at these points, but at the mile points they were.

Q. Have you there an observation made at one of the mile points?

A. Yes, sir.

[fol. 3045] Q. And at each mile point you did dig holes,

did you not?

A. Yes, sir. Well, this is just one sample; it gives the location. This particular one was on the slope of a wheat field. It gives the diameter of the pipe, and the type of couplings; whether it was new or second-hand pipe; the depth to cover; the amount exposed; the amount inspected. The type of soil at this particular place was sandy loam, and the sub-soil at the pipe was also sandy loam. We noted in this inspection if the top soil would crack when it was dry, and we have notations as to the vegetation and the topography and the drainage, and the type of treatment, and the condition of the coating, and the depth of the pits, if they were observed.

Q. After making these observations you worked out a

soil classification, did you not?

A. Yes, sir.

Q. What are the results of that analysis?

Mr. Griffith: Covering what territory?

Mr. Fitzhugh: From the Wheeler County Field to Vernon.

A. Well, I have that here as far as Quanah. Shamrock to Wellington Y, per cent machine work 87.11; loose rock [fol. 3046] 1.97 per cent; solid rock 1.23 per cent. Per cent hand earth 9.69 per cent. Childress Branch, from Wellington Y to Quanah, per cent machine work 91.94, loose rock 1.53, solid rock .45; per cent hand earth 6.08. Wellington Y to Quanah, on the North Branch, 95.47 machine earth; .92 per cent loose rock; 3.20 solid rock; .31 per cent hand earth.

Q. Now, in making those classifications, Mr. French, did you run across any soil conditions through Collingsworth and Childress—any of those counties, down as far as Quanah, where the sand was what is generally known

as blow sand?

A. Yes, sir.Q. Did you find any pipe exposed anywhere?

A. No, sir.

Q. Did you find any soil conditions anywhere along that route where you would expect the ditch not to be able to hold on account of the sand condition?

A. No, sir. There is one place—no, sir, there were none.

O. What did you start to say?

A. There was one place south of Prairie Dog Fork of the Red River of about a mile and a half, of real fine sand, but it would be—it would hold the ditch.

Q. Well, that's right in the river bed almost, isn't it? [fol. 3047] A. Well, within about a mile and a half south

of the river.

Q. Yes. That Prairie Dog Fork shifts around considerably, does it not?

A. Yes, sir.

Q. Did you find any bad river crossings or ditches or topography of the land generally that would be extremely difficult to excavate?

A. No, sir, except one place that is fairly rough, between Shamrock and—it is about twelve miles south of Shamrock, is a river break or a branch break, that you would have to take care of that by a good bit of hand earth.

Q. About how long a stretch is that?

A. That is about two thousand feet.

Q. And you say in your classification you have classified all of that excavation as hand earth excavation?

A. Yes, sir, and rock, where it is-

Q. Yes, sir; down around the section of the country where you get to the Prairie Dog Fork of the Red River, are there a lot of breaks down there, and branches, where you would have a hard time with excavation?

A. No, sir, most of that is under cultivation.

Q. Yes, sir. Where this line crosses the Prairie Dog Fork of the Red River what kind of a crossing is it? Is it a [fol. 3048] special crossing?

A. That is a special crossing, yes, sir.

Q. And what sort of excavation did you figure that would be?

A. That is all hand.

Q. All hand?

A. All hand, yes, sir.

Q. And so classified by you and included in those totals?

A. No, sir, not included in my totals.

Q. Because of its being special construction?

A. That is special construction and was handled entirely separate.

Q. What is the length of that crossing?

A. 2673 feet from gate to gate.

Mr. Griffith: What was the last part of your answer, from gate to gate?

· The Witness: From gate valve to gate valve.

Q. Did you see any place along in this part of the country—this part of Childress County, along the Prairie Dog Fork of the Red River, where the crossing looked like it would be as much as 7,000 feet?

A. Well, I didn't go up the-I didn't make any particular

study of that, but I didn't-

Q. Well, along this particular section. (Indicating on [fol. 3049] map.)

A. No, sir; no, sir.

Q. The North Branch of the Wellington Y, of the 12-inch, on this line you are talking about, does cross through the corner of Oklahoma, does it not?

A. Yes, sir.

Q. For about what distance?

A. About six miles.

[fol. 3050] Q. But the South Branch is entirely within the State of Texas?

A. Yes, sir.

Q. How far apart are the two crossings for the North Branch and the South Branch of the Prairie Dog Fork of the Red River?

A. About, I would say, fifteen miles—between twelve and fifteen miles.

Q. Would you say, following the Texas route—that is, the South Branch of the 12 inch—that there were any unusual construction difficulties of any sort in the building of that line?

A. No, sir.

. Cross-examination.

Questions by Mr. Griffith:

Q. Mr. French, have you ever had any experience in cross-country construction of natural gas pipe lines?

A. No, sir.

116-3104

Q. Were you present when the lines of the Northern Texas Utilities Company extending from the Shamrock field to the city of Wichita Falls were constructed?

A. No, sir.

Q. Upon what basis did you make your classification of hand earth, rock and machine excavation?

A. By direct observations.

Q. By walking over the territory?

A. Yes, sir.

Q. Did you only dig down in order to get the soil classification every mile?

[fol. 3051] A. That is correct.

Q. Now, the soil classification changes very quickly on that line, does it not—that is, you have sand for a stretch and then have red clay and then have solid rock and then loose rock and boulders, will you not?

A. That is correct.

- Q. Did you make any attempt to drive a bar down, say, at intervals of five hundred feet between these mile post observation points in order to determine the soil classification underneath?
- A. No, sir. But we were accompanied on the line by the General Superintendent of the United Gas System, and we took his classification as knowing—if there was any break between the surface and the pipe we took his classification.
- Q. So, except for these observations that you made every mile, you did not dig down or bar down in order to determine the soil classification as between loose rock, solid rock, hand earth excavation and machine excavation?

A. No, sir.

Redirect examination.

# Questions by Mr. Fitzhugh:

Q. When was this line built, Mr. French?

A. 1927, I believe.

Q. And this Mr. Kirby to whom you refer was an employee of the company which built the line, was he not?

A. I don't know.

[fols. 3052-3054] Q. That is, he is an employee of the company that is managing the line now?

A. Yes, sir.

Q. And he had the actual soil classifications, did he not?

A. They were in field books, direct quotations, which we took photostats of and checked in the field.

Q. After you completed your field check you had virtually

the same classifications, did you not?

A. Yes, sir.

Recross-examination.

### Questions by Mr. Griffith:

Q. It is rather rough in there south of that field, is it not —a good many gullies?

A. Not a great many, no, sir.

Q. Well, don't they call them young canyons up there?

A. No, there isn't any canyons through that particular section. There is one bad stretch.

Q. About how far south of the field?

A. I think it is at Mile Post 11-about eleven miles south.

Q. About eleven miles south of the field?

A. Yes, sir.

[fol. 3055] S. W. Freese, a witness for Plaintiffs, resumed his testimony, and testified as follows:

Cross-examination.

## Questions by Mr. Griffith:

Q. Mr. Freese, did anyone who ever had a dollar invested in the natural gas business at any time hire you to make a determination of depreciation reserve accruals?

A. No, the natural gas companies have their own experts that do that for them, and there would be no occasion, so far as I know, for the natural gas companies to obtain such a firm as ours for that purpose.

Q. And your firm has never been retained by anybody operating in the oil or gas industry for the purpose of mak-

ing such determinations?

A. We have never been retained by one of the natural gas companies to make such a determination as that.

Q. Have you ever been retained by an oil company to make such a determination as that in respect of steel pipe lines and similar facilities?

A. No, we have not worked for any of the oil companies either.

Q. On page 2 of Plaintiff's Exhibit 7, you provide for the [fol. 3056] amortization of rights of way on the gathering system in thirteen years?

A. That is correct.

Q. Does that mean that you estimate the average life of the gathering lines to be thirteen years?

A. That is correct.

Q. What is the factual basis for that assumption, if any?

A. It is based on the information furnished to the Railroad Commission by the company, that of the 347 connected Texas wells, the weighted average original rock pressure was 619 pounds. The weighted average rock pressure on December 31, 1931, was 521 pounds. Then, deducting from the December 31, 1931, pressure fifteen pounds to allow for probable average pressure on abandonment, the indicated life of these wells is 17.6 per cent expired. The weighted average life, to December 31, 1931, was 2.44 years. Therefore, the total life expectancy was 13.86 years, and we have used thirteen years.

Q. Please hold up the book that you are reading from, so the jury can see it. Where did you get that book from?

A. This is an exhibit submitted by the company to the Railroad Commission in the hearing before the Railroad Commission of Texas.

Q. Was it compiled by Mr. Ed C. Connor?

A. It was.

Q. Now as a matter of fact, Mr. Freese, all that you know about any of these depreciation matters is predicated upon [fol. 3057] your interpretation of exhibits offered by the company before the Railroad Commission of Texas. Isn't that so?

A. No, it is based entirely upon a study of all of the records either furnished before the Railroad Commission in the hearing held by the Railroad Commission, and we have had the auditors take off all of the charges to the depreciation reserve. We have been furnished with all of the pipe mortalities by the company, and some of that information was submitted to the Railroad Commission, but we have been able to obtain all of the information necessary to make a definite determination of each one of these matters set forth in our exhibit.

Q. Can you refer to the exhibit offered by Mr. Ed C. Connor before the Railroad Commission of Texas, and read-

ing from that exhibit, show me any place where gathering lines are said to have an average life of thirteen years?

A. No, this was worked out for the Texas wells. Now, these gathering lines have a minimum total life expectancy equal to that of the wells to which they are connected. In some cases the gathering lines serve two or more wells, in which cases the gathering lines would have a greater life expectancy than the wells which they serve.

Q. Now, as a matter of fact, no place in the exhibit of Mr. Ed C. Connor, offered to the Railroad Commission of Texas, is there any statement to the effect that the average life of the gathering lines is thirteen years. Isn't that

correct?

A. So far as I know, that is correct.

Q. And what you have testified to—

[fol. 3058] A. But, as a matter of fact, Mr. Connor did not, in the hearing before the Railroad Commission, allow for the amortization of gathering line rights of way at all.

Q. And as a matter of fact your estimate of a thirteen year life as to those gathering lines is merely your construction of the data that was furnished by Mr. Ed C. Connor—isn't that so?

A. No, that is not entirely so. In the first place, we made a check of each one of the wells, to determine what was the original rock pressure, and that was information furnished to us by the company—the only possible place for it. We also checked the rock pressure on December 31, 1931, for all of the company owned wells. In addition to that, in the estimate of future drilling costs, in connection with Mr. Hulcy's Exhibit as to the value of gas leaseholds, the life as worked out from that was in excess of thirteen years, and in this Exhibit 42 the average life submitted by the company in this hearing—the average life for field lines and well-lines is fifteen years.

Q. Now, Mr. Freese, you have testified as to certain data up to the year 1931; where have you secured any data for the years 1932 and 1933, relative to rock pressures of wells

and life of gathering lines?

A. We have not secured that information. However, if

this was correct then, it is correct today.

Q. In other words, your assumption of a thirteen year life is predicated upon data which was known as of De-[fol. 3059] cember 31, 1931, and upon any data acquired from that date on?

A. Well, as I stated before, the data submitted by the company in this case in connection with Mr. Hulcy's exhibit, indicates that the way wells will be drilled in the future shows them to have a life greater than thirteen years, and also exhibit 42 estimates an average life for field lines and well lines of fifteen years.

Q. Did you make any independent study for the period of 1932 or 1933 or this far in 1934, to ascertain the data which was available and which would be disclosed relative to the life of gathering lines as between the period Decem-

ber 31, 1931, and this date?

A. Yes, I have a good check on that, knowing the amount of the gas reserves of the company and the amounts that were drawn out in 1933 and 1932, the decline in rock pressure per unit of delivery was bound to have been less those two years than before that time.

Q. Did you make any determination of rock pressures

as of December 31, 1933?

A. No.

Q. Did you make any as of any period following December 31, 1931?

A. No, we made one for each well as of December 31,

1931, but have not made any since.

Q. Now, as a matter of fact, Mr. Freese, you have not been in the office of the company in Dallas for a year and a half, have you?

A. Not that I recall at this time. I don't remember

[fol. 3060] having been there in the last two years.

Q. You don't remember having been there in the last two years?

A. No.

Q. And isn't that the only place that the rock pressures

would be available to you?

A. Well, I stated I have not made a definite determination of the rock pressures since December 31, 1931. However, if thirteen years was the average life of those wells at that time, there has certainly been nothing to decrease the average life of the wells since that time.

Q. Mr. Freese, you referred on yesterday to Lines B and C as having an indicated longer life than you had estimated for the average of the lines in the transmission line

equipment?

A. No. I made no such statement—what I said was, that according to my mortality curves, that the mortalities of

those two oldest lines in the company's service would have, been twenty per cent, instead of the actual mortalities on those lines of nine per cent.

Q. All right, we will accept your version of what you said, but I will ask you this: Do you know what happened to Lines B and C, so far as major rehabilitations were con-

cerned?

A. Yes, and I know that in Line B, that the joints in line B were reworked. I also know that any mortalities which took place by reason of that major rehabilitation are included in the mortalities which we have given credit to those lines for.

Q. When was there a major rehabilitation of Line B? [fol. 3061] A. I do not recall just when that took place.

Q. All right, when did it take place, or when it did take

place, what did the work of rehabilitation include?

A. It included taking up the pipe, feworking the joints, throwing out the bad pipe, resurfacing or repainting the other pipe.

Q. And putting it back in the ground?

A. Yes.

Q. Now, you don't know when that took place. Well, do you know when the rehabilitation on Line C took place?

A. No, at this time I do not recall. .

Q. Well, what did the work consist of in rehabilitating Line C?

A. It was similar to the work done on Line B.

Q. What would be the effect of such major rehabilitation work on the expected service life of those lines, and the

joints of pipe in the lines?

A. It would prolong the life. However, we have made an allowance for major rehabilitations which would be—that is, for all of your lines or certain parts where that work was necessary—made in the future, just as it has been done in the past.

Q. As compared with the average of transmission line equipment which you have evaluated, are Lines B and C laid in soil which is conducive to longer or shorter life of

pipe?

A. Lines B and C give a very good cross section of the section where there are more lines than in any other section—that is, from Dallas to Fort Worth and from Petrolia to Fort Worth, there being Lines B, Line Second B and the [fol. 3062] Government ten inch. The largest volume or

capacity of gas being right down that line. Now on Line Second B in Clay county, are encountered the worst soil conditions on the whole Lone Star Gas Company's system.

Q. Now, what about Lines B and C over-all as compared with Lines E and G? Are Lines B and C laid in soil which is more favorable for the longer life of pipe than is the soil where Lines G and E are located?

A. Of course, Line G is practically all in Oklahoma, and

we are not considering that in this work.

Q. All right-Lines F and E.

Mr. Fitzhugh: Are you talking about Line E proper?

Q. Yes.

A. Well, parts of Lines F and E are in black soil which is fairly hard on pipe, and part of them are in sandy soil which is very light on pipe, and I should say as typical of the whole system that B and C are not any better or worse than the average.

Q. You would say then that B and C are typical of all the transmission line equipment, which you have included in your evaluation, which is known here as Plaintiffs' Exhibit

6?

A. Substantially so, yes.

Q. Now, on page 7—or rather, on page 3 of Plaintiffs' Exhibit 7 you have provided for the amortization of transmission system measuring station equipment, in a forty year period. Is that correct?

A. That is correct.

[fol. 3063] Q. What is the type of measuring device used in those stations?

A. Well, they are practically all positive meters such as the Emco meters; that is the largest item; then there are regulators and valves—

Q. Well, are they all positive meters?

A. No, I don't know that all of them are, but the common type is the positive meter. There are very few orifice meters in those stations.

Q. As a matter of fact, aren't there a number of those orifice meters in those stations?

A. Yes, but compared to the cost of the larger meters,

that would be a fairly small amount.

Q. Mr. Freese, how long have the Emco positive meters, of the type used by the company and in service at these measuring stations been in use?

A. I do not know, but I do know that these meters are constantly being rehauled, reworked and renewed, and that the cost of doing this work is charged one hundred per cent to operating expenses; by the method that the company has adopted in handling these, they should last indefinitely.

Q. Mr. Freese, did I ask you where the expense of the

maintenance of these meters was being charged?

A. No, but my answer was that the way the company handled these meters, the life of them should be indefinite.

Q. All right; now how long have meters of this type been

in use? Can you guess within five years?

A. No.

[fol. 3064] Q. All right; meters of the orifice type which are found in the transmission system measuring station equipment—how long have they been in use?

A. I should say from twenty to thirty years,

Q. From twenty to thirty years—orifice meters of that type have been in use in connection with this measuring station equipment?

A. Well, my only knowledge of that is with reference to water. Orifice meters have been used on water, I know,

for twenty years.

Q. Don't you know as a matter of fact that the orifice meters of the type used in connection with transmission system measuring station equipment of the company are

the product of the last ten to fifteen years?

A. That may be true, and as I stated before, it would not make any difference if the life of them were only three years; if you renew all of them every three years, charging all that to operating expenses, you will get an indefinite life of these meters.

Q. Did I ask you anything about an indefinite life of those meters?

A. I understood you wanted to know how long they would last.

Q. No, I asked you how long they had been in use. Now are you able to state how long these orifice meters have been in use?

A. No.

Q. Now this company started in business in 1909, didn't it, Mr. Freese?

A. Yes. ·

Q. What was the type of measuring device which was in

[fol. 3065] use in 1909 for the measurement of gas whole-sale at the city gates?

A. I don't know.

Q. You don't know?

A. No.

- Q. What was the type of measuring device that was in use in 1915 for the measurement of gas sold in wholesale volumes at the city gates?
- A. The present types of larger meters have been in use substantially since 1915.
- Q. Did you ever hear of the Westinghouse proportional meter?
  - A. Yes.
  - Q. Did you ever hear of the Venturi meter?
  - A. Yes.
- Q. Were those meters in use from the period 1909 to 1915?
- A. Yes, the Venturi meter was invented along about 1900 and was in use during the period to which you refer.
- Q. Now, this company has had a corporate existence of twenty-five years, has it not, Mr. Freese?
  - A. Yes.
- Q. Do you know of your own knowledge whether there is a single measuring device in connection with the transmission system measuring station equipment, which has not been outmoded and replaced by newer and more efficient devices in that period of twenty-five years?

A. That is entirely possible.

- 'Q. Upon the basis of your amortization of the present [fol. 3066] equipment in forty years, do you make any allowance for change in the mode or manner of measuring gas wholesale or for the fact that this equipment will doubtless be replaced by better and improved equipment within a period of time substantially less than forty years?
- A. Yes, I do. In the item of current replacements, in the percentage of 1.322, there has been charged to the depreciation reserve and was included by us in making our study in which we arrived at this figure, certain major rehabilitations—for example, in 1933, the Haines station was one of the stations which was completely reworked and rebuilt, and that figure is sufficient to take care of such major rehabilitations and reworkings as that.

Q. Now, how far back did your study go—the study that you spoke of there?

A. 1927.

Q. To 1927?

A. Yes.

- Q. Well now, what change in the mode or method or manner or the device for the measuring of gas has taken place since that year of 1927?
  - A. I do not know of any major changes in the method.
- Q. All right, if you don't know of what major changes have taken place since 1927, do you know what substitution of measuring equipment was made in connection with the Haines station, concerning which you have testified? [fol. 3067] A. No, I do not know, but I do know that during these years it was necessary to make certain major rehabilitations, and they probably included changing the type of metering devices. However, we have taken into consideration the full costs of making those changes, made on the books of the company.

[fol. 3068] Q. Why, Mr. Freese, if you don't know what changes were actually made, how could you take into consideration, in your percentage of 1.322 per cent, replace-

ments that you didn't know anything about?

A. Because I know that these amounts—1929, \$7,548.19; 1930, \$7,115.94; 1931, \$3,577.98,—that whatever-major rehabilitations of these stations there were, they were charged to this account.

Q. Well, can you tell me where in those years, or can you tell me, in dollars, how much of that major rehabili-ation was attributable to a change in measuring devices?

A. No; those included changing the stations, and rework-

ing the stations entirely in several cases.

Q. Mr. Freese, refer to page 4 of your exhibit—Plaintiffs' Exhibit 7. Now, you have an adopted annual rate for replacements and amortization of 1.70 per cent, do you not?

. A. That is correct.

Q. How much of that is for replacements, and how much of it is for amortization?

A. Well, it varies from year to year. In the first year of the 1.70 per cent, .02 per cent is for replacements, the rest of it goes into the amortization fund; in the forty-fifth year [fol. 3069] the amortization fund had to be called upon for the difference between 3.46 per cent and 1.70 per cent to make replacements; in other words, the replacements that year amounted to about twice as much as the even annual amount, and the amortization fund, which at that time

amounted to identically one hundred per cent of the whole cost of the system, was called upon to make up the deficiency.

Q. Now, Mr. Freese, as I understand it, a breakdown of your column headed Annual Rate for Replacements and Amortization,—in so far as those portions of 1.70 per cent, which would go for replacements and amortization, respectively, could be obtained by deducting from 1.70 the replacement percentage shown in the second figure column on page 4?

A. Yes; that would show during the early years what went into the amortization fund, and during the later years of the life of the pipe what came out of the amortization

fund.

- Q. Now, Mr. Freese, in the first column on page 4 of Plaintiffs' Exhibit 7 you start out with the first year of a brand new property, do you not?
  - A. Yes.
  - Q. Is Lone Star Gas Company brand new property?

A. No, it certainly is not. .

[fol. 3070] Q. Where are we in the year column on page 4 of your Exhibit 7, in relation to the public service plant and property of Lone Star Gas Company?

A. You are along about the eleventh or twelfth year.

Q. Along about the eleventh or twelfth year?

A. Yes, sir.

Q. Now, in order for your reserve accrual rates to work out, isn't it true, Mr. Freese, that you must presuppose the existence and use of substantial balances in the depreciation reserve account being accumulated up to the present time?

A. That is correct. The whole purpose of this fund—of an amortization fund or a depreciation fund is to take care of the used up life of those units of property. In other words, the present operating expenses are not designed to take care of the replacements of pipe which will be used in future years, but are designed to take care of what is actually used up during that particular accounting period. Now, if during the past period a certain amount of the life of this pipe system has been used up, then during those years there should have been set aside a reserve to take care of the final using up of those units of property.

Q. Now, Mr. Freese, I want to ask you this question,— [fol. 3071] isn't it true that in order for your annual reserve accrual rates to work out satisfactorily in respect of the transmission line equipment, you must presuppose, and do presuppose, the existence and use of a credit balance in the depreciation reserve account applicable to transmission line equipment in the approximate amount of \$5,000,000.00?

A. That is substantially correct; that \$5,000,000.00 may or may not be the amount which the Company has actually set aside as part of these \$14,000,000.00 worth of reserves which have been built up. However, that is, according to this table, the correct amount which should have been set aside for the wearing out of this property in use in past years.

Q. Mr. Freese, what you have testified to in respect of transmission line equipment is equally applicable to your reserve rates—reserve accrual rates in respect of all other

classifications of property, is it not?

A. All other classifications, yes.

Q. In other words, in order for your annual reserve accrual rates to work out, it would be necessary to draw upon the balances in the depreciation reserve account for replacements and retirements and amortization?

A. Absolutely.

[fol. 3072] Q. Without the use of credit balances in the depreciation reserve account as of this date, would your reserve accrual rates be maedquate?

A. They certainly would be. However, when I say the adequate reserves, I do not mean what the Company may or may not have actually built up. I mean what they should have built up; and what the proper amount should have been as of this date.

Q. As a matter of fact, has the time now either arrived, or will it presently arrive, when your depreciation reserve accrual rates will be inadequate to provide for the replacements, major rehabilitations and amortization of the property?

A. Well, it shows between the seventeenth and eighteenth years that the annual rate for replacements and amortization will equal the replacements, and from that time on it will be necessary to draw upon the reserves which have been built up during the first seventeen or eighteen years, when there were very few replacements, the pipe being practically new, and during which time the pipe was gradually giving up its service life, and during which periods those reserves should have been set up in the proper amounts.

Q. In other words, Mr. Freese, if we look at the column headed "Year", and we go down to the eighteenth year, we

[fol. 3073] observe that in the column headed "Replacements", immediately opposite the percentage factor of 1.78 appears?

A. Yes.

Q. And that is 8/100 of 1 per cent over and above your annual rate for replacements and amortization of 1.70 which you use during the years 1 to 45, inclusive?

A. Yes. The whole purpose of any depreciation fund, or amortization fund is to take care of such deficiencies as occur

in the last years of the life cycle of a unit of property.

Q. Now, Mr. Freese, have you testified that the Sinking Fund Method as used by you is only applicable where an undepreciated rate base is used or where the reproduction cost new is used?

A. Yes; that is necessary, because it is assumed that these reserves will gain or make the same rate of interest as the rate base itself.

Q. As I understood your testimony, you used a six per cent interest factor?

A. That is correct.

Q. Why did you use a six per cent interest factor rather

than some other interest factor?

A. In the first place, because the Railroad Commission settled or determined upon a six per cent rate of return. [fol. 3074] Now, since practically all of this amortization fund or depreciation reserves have been invested in the property of the Company itself, if a six per cent return is allowed to the Company, then these funds so invested will also draw six per cent. Furthermore, the Company has a large reservoir for such investments in the money which it owes the Corporation—some seventeen million, six hundred thousand dollars—which draws a six per cent rate of interest. So every cent of this money that can be invested in paying off that debt will earn six per cent, or will save six per cent interest.

Q. Mr. Freese, can you refer me to any determination of an actual sinking fund accrual where a six per cent interest factor is used in connection with any public utility property,

any place?

A. No. However, I cannot refer you to none other than six per cent. They vary according to the circumstances of the case.

[fol. 3075] A. It is my opinion that the sinking fund rate of interest should be the same as allowed for the rate base. Now, if seven per cent were allowed, then these figures should be changed accordingly.

- Q. As a matter of fact, in connection with sinking fund accruals, Mr. Freese, isn't it customary to use a low rate of interest which will insure them, because securities which [fol. 3076] are of the better sort will only yield a lower rate of interest?
- A. It all depends upon the particular circumstances. each case the percentage should be determined which can or could be earned at that particular time by the Company under consideration.
- Q. Now, Mr. Freese, will you refer to page 12 of your exhibit? On page 12, which purports to be Plate II, Depreciation Analysis-Steel Pipe,-you show Lines J and C as not in solid colors in connection with the year 1931, do you not?
  - A. That is correct.
- Q. Now, as a matter of fact Lines J and C-there were substantial replacements on Lines J and C?
  - A. In the amounts shown on this graph.
- Q. And the spacing which is enclosed, covering Lines J and C on this graph, represents actual replacements?
  - A. That is correct.

Q. Now, it was your testimony that those replacements

would not need to be made again?

- A. Well, here was the point which I was trying to make in connection with that, Mr. Griffith,-in the first place, that the calculated mortalities up to this point equal the actual mortalities, including Lines J and C: that the replacements on Lines J and C were of such a nature that it should be ex-[fol. 3077] pected that they would be distributed more evenly throughout the life of the property.
  - Q. That is, the replacements on those particular lines?
- A. No, not just the replacements on those particular lines, but all similar replacements to be made on other lines.
- Q. All right. Now, that was for the year 1932, was it not?
- A. No, that was for the year 1931. In 1932, we estimated that the replacements would be about sixty miles; whereas, they were only six miles.

Q. All right; what happened in 1933 in regard to similar replacements?

A. Well, they jumped up, but they still didn't reach the-

our curve for the predicted mortalities for 1933.

Q. Now, the replacement on Line J was of about 35,000 feet of pipe, running in a northerly direction from Joshua Station-towards Fort Worth, was it not?

A. Yes.

Q. And you stated that that replacement was caused by two causes, which would be non-recurring, did you not?

A. Substantially so. There are two reasons which would be attributed to that failure,—one was defective pipe; the other—which seems more probable—was the nature of the inert gas or the mixture which came into that pipe from [fol. 3078] the Joshua Station.

Q. And you testified that the reason that the Line C replacement would be non-recurring was because that change and removal which was made in connection with the Dallas

County Levee District changes?

A. That is correct. However, I didn't mean to leave the impression that we had not included this mortality in arriving at this curve. We have given full credit to those mortalities.

Q. Now, in 1933, what happened to Line J-2, running be-

tween Fort Worth and Dallas?

A. Well, a continuation of those replacements on Line J, and I take it from the case causes, were made on Line J-2, and we have taken those into consideration.

Q. As a matter of fact, don't you know that the changes that were made in Line J-2 had nothing whatever to do with the causes which necessitated the replacements on Line J?

A. No.

Q. You don't know that?

A. No.

Q. Was there any substantial amount of pipe removedin connection with Line J-2 for the year 1933?

A. Yes, about 17,000 feet of 3-inch equivalent.

Q. You don't know, from any information in your pos-[fol. 3079] session, as to what caused that change?

A. No.

Q. Well, now; in 1933 were there any substantial replacements on Line J or Line L?

A. There was very little on Line J; on Line L, yes, there was; the most replacements which the Company made during 1933 were on Line L—16-inch.

Q. Line L, that is a 16-inch line running south from Joshua, Texas, is it not, in the general direction of Waco?

A. That is correct; and-

Q. Now, what were the replacements on Line L?

A. 119,000 three-inch equivalent feet.

Q. That would be, in round figures, twenty-two miles, would it not?

A. Yes; and that was a further curing of the situation caused by reason of the nature of the gas which had been going into the lines at Joshua.

Q. So while there was no recurrence of the factor which made for the replacement of the pipe on Line J, as far as Line J was concerned, the factor was present and necessitated the removal of pipe in connection with Line L?

A. That is correct, and it occurred during the same

period of time.

[fol. 3080] Q. Now, on page 11, Mr. Freese, of Plaintiffs' Exhibit 7 is your mortality curve for steel pipe—is that correct?

A. Yes.

Q. Your mortality curve shows your adoption of a thirty-three and one-half year life for steel pipe, does it not?

A. Yes.

Q. And all of your calculations in respect to transmission line equipment, and gathering line equipment, and pipe lines generally evaluated by you, and for which you have made depreciation reserve accrual calculations, are predicated upon a thirty-three and one-half year life for steel pipe?

A. Yes, not taking into consideration—in other words, in addition to those allowances, there would be one for major rehabilitations and one for major removals. .

Q. Yes, but the thirty-three and one-half year life might be what you would call the foundation stone—

A. It is the basic mortality curve.

Q. It is the basic mortality curve?

A. That is correct.

Q. In connection with your calculation of reserve accruals applicable to all of the steel pipe of the Company?

A. That is correct.

[fol. 3081] Q. How long has steel pipe been made?

A. Oh, about since 1900.

Q. Since 1900. When was the first steel pipe used in Texas?

A. Along about 1904 or '5, I believe; possibly some sooner than that.

Q. In other words, there is no steel pipe in Texas that is

more than thirty years old?

A No, but there is a lot of it that is thirty years old that is in perfect condition.

Q. Where is that?

A. Well, you can examine most any of your lines and find lots of pipe that is in excellent condition.

Q. Where is there any pipe in the Lone Star System that

is thirty years old?

A. Well, there is none of it in the Lone Star System that is thirty years old. What I was referring to particularly was stretches of Line B and—or Line B particularly, which was laid in 1909, which would only be twenty-five years old.

Q. Now, do you know of a single piece of steel pipe in Texas that is thirty years old—can you refer me to a steel pipe line, as distinguished from a pipe joint, in the State of Texas, which is thirty years old?

A. No; some of those small lines around the Petrolia

Field are just about that old now.

[fol. 3082] Q. When was the first gas well drilled in the Petrolia Field?

A. It must have been along about 1904 or 1905, because some of those early lines the Company bought were put in about 1904 or 1905.

Q. As a matter of fact, wasn't the first well drilled in the

Petrolia Field in 1906 or 1907?

A. Yes; that is probably true. I have here lines laid in 1908.

Q. Now, Mr. Freese, if you are wrong in taking as a basic factor a 33½ year life of the steel pipe, would it necessarily follow that your reserve accrual rates covering transmission line equipment and other pipe lines would be too low?

A. Yes, if I am wrong in that 33½ years is not the probable average life—that is, that it is less than that—then my reserve accruals for that particular purpose would be too

low. It does not mean, necessarily, that my overall allowance would not be sufficient, however.

Q. Where would be your sponge in your overall allowance. that would make up for the difference or for the excess life

which you have attributed to the steel pipe?

A. Well, I was speaking of the properties as a whole. I explained yesterday why I thought there were certain duplications in the three allowances that were made on compressor stations.

[fol. 3083] Q. If the average life of steel pipe is 25 years, would your allowance in connection with your reserve ac-

cruals be substantially affected?

A. It would be affected—just in what amount I do not

know offhand; I can find out.

Q. In connection with your calculations and estimates of proper annual reserve accruals, you have made some allowance for major removals, have you not?

A. Yes.

Q. That is predicated upon the history of the Company up to December 31, 1931, is it not?

A. Yes.

Q. There have been no substantial major removals from

December 31, 1931 up to the present time?

A. No; and if we had brought our figures forward to the present time and taken an average over the past up to the present time it would have decreased our allowance in a slight amount.

Q. There is some testimony in the record to the effect that Line 2nd H will either be taken up and moved to another location or taken up and rehabilitated and put back in its present location; and there is also some testimony in the record to the effect that Line K-A will be removed in its entirety during this present year of 1934. If either of those things happen would they not have a substantial effect upon [fol. 3084] your allowance for major removals?

A. Of course, so far as Line K-A is concerned, or any gathering line, we have allowed for the complete reproval of that pipe every nineteen years, and some of those are bound to occur from time to time. So far as Line H is concerned, it is in Oklahoma, and I do understand from the testimony

that you contemplate a major removal of that line.

Q. You stated also that Line K-A is a gathering line, and that in connection with your gathering lines you have allowed for their removal in 19 years?

A. Yes.

Q. When was Line K-A built?

A. I don't have that figure with me right now.

- Q. As a matter of fact, don't you know, Mr. Freese, that Line K-A was built in the period of the last four to six vears?
  - A. I would not say that it was not, as I am not certain.

Q. Well, what is your best guess?

A. I say I don't know whether it was or was not.

Q. If the testimony show-that it was built in the last four or six years, the fact that you have allowed for its removal in 19 years would show that in so far as that particular line is concerned your allowance for removals is inadequate?

A. In so far as that line is concerned; but if other lines in the Panhandle Field last much longer than 19 years—the [fol. 3085] average was the only thing I was driving at.

Q. If there is a major removal of Line 2nd H and of Line K-A during 1934 do you know how much in mileage of 3-inch pipe equivalent feet that would be?

A. No; but I could work it out.

. Q. My rough calculation leads me to believe that it is about 70 miles of 12-inch pipe, and that would be 280 miles of 3-inch equivalent pipe?

A. That is correct.

Q. And that would represent a 3-inch pipe line running from San Antonio, Texas on the south, to Fort Worth, Texas, on the north, would it not?

A. That is correct. However, as I stated before, the gathering lines are not intended to be taken care of out of the allowance for major removals. That applies only to the

main lines and tap lines.

Q. Mr. Freese, in connection with your depreciation reserve accrual rates covering compressor stations, have you made any study of the probabilities of removal of the Ibex, the Ranger Plants 1 to 4, and the Breckenridge Compressor Stations?

A. No. It is my impression that part of the Ibex plant

is being gradually removed.

Q. Do you know of the factors which will make for the necessity of the removal of those stations in the near future? [fol. 3086] A. Well, the depletion of the gas supply to those stations.

- Q. Well, what is the gas supply to those stations—where does it come from?
- A. Well, those plants around Ranger, their supply comes largely from gasoline plants.
- Q. Are you able to state the trend of the volume of gas which the Company has been able to secure as residue gas from those casinghead gasoline plants over the last several years?
- A. It is decreasing—that is, the amount being taken from these stations is decreasing.
  - Q. And has been decreasing very substantially, has it not?
  - A. It has been decreasing.
- Q. Now, what consideration did you give to the probability of the removal of those stations in the near future in the determination of your annual reserve accrual rates as applied to compressor stations?
- A. Well, as before stated, in arriving at this figure of 1.360, we simply checked the data submitted by the Company in a hearing before the Railroad Commission, and felt like it was substantially correct, and in which it was estimated that an amount of 1.240 per cent was necessary to take care of these major removals and abandonments. That was on a 7 per cent sinking fund basis, which the Company used. We changed that to a 6 per cent sinking fund basis, and increased the figure from 1.240 to 1.360 per cent per annum.
- [fol. 3087] Q. Now, as a matter of fact, in connection with: your determination of annual reserve accrual rates, as testified to by you before the Railroad Commission of Texas, you used a seven per cent interest factor, did you not?
- A. Yes; but as I stated in the hearing there, if the Railroad Commission set any other figure for rate return than seven per cent, that this sinking fund interest rate should be correlated to exactly the figure they used; and I think that was stated very clearly by me in the hearing before the Railroad Commission.
- Q. I think it was, Mr. Freese; and when you use the term, "We changed that to six per cent", I assume you refer to what you and the Railroad Commission ordered and did in Gas Utilities Docket No. 75?
- A. No; I refer to my own particular firm or myself when I say "we".

Q. Mr. Freese, at any place in connection with your Plaintiff's Exhibit No. 7, do you make any allowance for the decline in per cent condition of property?

A. No; we do not.

Q. Is that for the reason that the sinking fund method

presupposes the use of an undepreciated rate base?

A. It not only presupposes the use, or supposes the use of an undepreciated rate base, but it also is designed to completely amortize one hundred per cent the value of the property.

[fol. 3088] Q. Mr. Freese, what causes the corrosion of

steel pipe?

A. Almost entirely some form of electrolysis.

Q. Is it a matter of local or general conditions?

A. Usually local.

Q. When is it general?

A. Well, when the soil conditions are general which are conducive to electrolysis.

Q. What soil conditions are peculiarly conducive to elec-

trolytic action?

A. Of course, there may be some cases where the corrosion is due entirely to direct chemical action. I think that is more or less rare. The best—if I may start in reverse order—the best soil would be sandy soil where the drainage is good. The next worst condition would probably be black land, which is a breakdown of limestone. The next worst condition would probably be alkali soils; and in that connection, even worse, are certain gyp-rock areas, or gypsoil areas.

Q. Well, don't you find alkali substances present in sand .

many times?

A. Sometimes; but in general, on the Lone Star Gas Company's system, wherever the pipe has been in sand, the pipe has been in perfect condition. I don't recall an exception to that.

[fol. 3089] Q. And would you say that, as a general rule, the pipe has been in the worst condition in the black soil

areas?

A. Well, no; the worst condition is where there is some peculiarity about the drainage condition, or an alkali soil; although by and large, the worst condition,—that is, in the big aspect of the case—is in the black land territory.

Q. Mr. Freese, when you add in the correction of \$16,600

which you testified to on yesterday, your annual depreciation allowance covering the gathering system property, transmission system property, compressing system property, general system property, and non-physical property, that figure of \$848,546.08, in Plaintiff's Exhibit 6, represents what percentage of your total evaluation of the properties set forth in Plaintiff's Exhibit 6?

A. Something over two per cent. Of course, this does not include the automotive equipment, the depreciation on which is handled as an operating expense by the Company.

Q. But if we express \$848,546.08 as a per cent of the reproduction cost new of the property set forth in Plaintiff's Exhibit 6, what is the exact percentage?

A. You mean, leave off—just on the physical property?

Q. No; as applied to the overall reproduction cost new?

A. 2.16 per cent.

Q. 2.16 per cent?

A. Yes.

[fol. 3090] Q. As applied to the physical property, what is the percentage—or as applied to the depreciable property, I should say, Mr. Freese?

A. 2.48.

Q. 2.48 per cent?

A. No; 2.38 per cent.

Q. Of course, Plaintiffs' Exhibit 7, in so far as depreciation reserve accrual rates are concerned, is based upon the sinking fund method, throughout?——

A. Yes.

. Q. —for the determination of your reserve accruals?

A. Except for current replacements.

Q. You testified before the Railroad Commission of Texas, did you not, Mr. Freese, in connection with annual reserve accrual rates?

A. Yes.

Q. Did any other witness testify in behalf of the Commission?

A. No.

Q. On reserve accrual rates?

A. No.

Q. Did you present to the Railroad Commission of Texas in Gas Utilities Docket No. 75 any determination of reserve accrual rates for the Texas property only?

A. Well, these rates would be equally applicable to Texas and Oklahoma properties, but there was no working out of

[fol. 3091] the detail amount for Texas as differentiated from the properties as a whole.

Q. As a matter of fact, Mr. Freese, you merely made a determination of the annual reserve accrual expressed in percentage and dollars for the overall property in Texas and Oklahoma, did you not?

A. Well, the total amount, after applying the particular

rates, was for the overall property, yes.

Q. You made no attempt to segregate the Texas properties?

A. Not in arriving at that overall amount.

Q. And you similarly made no attempt to segregate the Texas properties as far as the evaluation of the properties was concerned, when you testified before the Commission?

A. No; we had made for the Commission and presented to them an evaluation of Texas property only; but before the Railroad Commission we presented the properties as a whole.

Q. Well, you are referring now to your first appraisal which you made to the Commission, and which appraisal was never used?

A. That is correct.

Q. That appraisal was not introduced in evidence in Gas Utilities Docket No. 75?

A. No.

Q. Now, you have three separate determinations, have you not, of proper annual reserve accrual rates to be applied to the Lone Star Gas Company's public service property?

A. That is correct.

[fol. 3092] Q. The first determination was in connection with the first appraisal that was presented to the Railroad Commission and was never used by the Commission in evidence?

A. That is correct.

Q. The second determination was when you testified before the Railroad Commission in Gas Utilities Docket No. 75?

A. That is correct.

Q. And the third determination is represented by your Exhibit 7 in this case?

A. Yes, but it is not a different one; it is almost identi-

cal, except for the change in the interest rate, which increased it from what was stated before.

Q. Expressed as a percentage of the reproduction cost new of the property, the per cent for annual reserve accrual as indicated by your Exhibit 7 is in excess of the percentage which was indicated by your exhibits before the Railroad Commission?

A. Yes; it is more by reason of the fact that we have used a lower rate—lower interest rate for the accruals.

Q. As a matter of fact you changed some of the other percentages, have you not, Mr. Freese, in connection with pipe and the Transmission Line Equipment—did you use the annual rate of 1.70 when you testified in Gas Utilities Docket No. 75?

A. No, but it would have been 1.70 in this case if we had

based it upon a seven per cent sinking fund basis.

Q. Your testimony is that the only change, then, is by [fol. 3093] reason of the shift from a seven per cent interest factor to a six per cent interest factor?

A. As far as I recall now. There may be some minor

changes.

Q. Now, Mr. Freese, expressed as a percentage, you say that your determined annual accrual as set forth in Exhibit 7, in the amount of \$848,546.08, is 2.16 per cent of the reproduction cost new of the property set forth in your Exhibit 6?

A. Yes, including non-physical property.

Q. Mr. Freese, I hand to you Volume 1 of the first appraisal and report which you presented to the Railroad Commission of Texas covering Lone Star Gas Company's public service property. In that connection you made a determination of annual reserve accrual rates on a straight-line method, did you not?

A. That is correct.

Q. As distinguished from the sinking fund method?

- A. That is correct, and which would be applied to the depreciated values of the property.
- Q. Now, in this case your percentage for depreciation is 2.16 upon the sinking fund method?

A. Yes.

Q. As of December 31, 1931, what did you determine was the proper annual accrual expressed as a percentage applicable to the physical property of the company?

A. 4.205 per cent, which includes all of the Production [fol. 3094] System property, which, of course, carries the higher rates of depreciation, and when that correction is made I think you will find that for those on a straight-line basis the figures which we have used on a sinking fund basis are almost identical.

Q. Referring again to your determination of annual reserve accruals on the straight-line method in the first valuation and report which you made to the Railroad Commission of Texas, and which report was never used, and tell me what was the over-all percentage applicable to both physical property and non-physical property which you determined was a proper annual reserve.

A. 3.0902 per cent, and it also included Production property, which carried higher depreciation rates, which, if corrected back to the sinking fund method, would give almost identical results with what we have obtained here.

Q. Mr. Freese, you up to this time have not testified as to the proper reserve accruals covering depreciation or depletion in connection with Production System Property?

A. No.

### Redirect examination.

# Questions by Mr. Fitzhugh:

Q. Mr. Freese, you have been questioned about the use of straight-line and sinking fund methods of providing for annual depreciation?

[fol. 3095] A. That is correct.

Q. I believe you heard the testimony of the company's witnesses where it was said that the straight-line method had been recognized by the Interstate Commerce Commission and in some of the cases appearing before the United States Supreme Court?

Mr. Griffith: I don't believe that the witnesses said that it had been recognized in cases appearing in the Supreme

Court, Mr. Fitzhugh.

Q. Well, at any rate, the straight-line method has been recognized generally, has it not?

A. That is correct.

Q. That is also true of the sinking fund method, is it not?

A. They are the two well recognized methods, and al-

though we have used the sinking fund method, the company in its exhibits used both methods.

Q. Now, the old type Westinghouse and Venturi meters are not in use now?

A. No; they have been replaced with newer types.

Q. The present type meter used in the company's in-[fol. 3096] stallations is a very satisfactory meter, is it not?

A. Yes; I think they are well within the range of accuracy necessary for such meters.

Q. State whether or not it is a fact, in your opinion, Mr. Freese, that even if some new measuring devices should be invented, for the present the metering system would not serve adequately for the company's purposes?

A. The present metering devices are serving the com-

pany's purposes.

Q. And there is no reason to believe that they could not serve throughout their service life to accurately measure the company's gas; is that correct?

A. Yes; being properly maintained, as they are.

Q. Now, you were questioned to some extent about the thirty-three and a half year life in connection with steel pipe. Of course, if there is no steel pipe in any pipe line in Texas that has been in the ground thirty-three and a half years you wouldn't have any way to test your assumed age for that pipe, would you?

A. That is correct. We can only test it by mortalities which have happened in the future, and of course we know the shape of the mortality curves for pipe in some similar

units of property.

The Court: You don't mean mortalities that happened in the future, do you?

[fol. 3097] A. No; I mean in the past. Excuse me.

Q. There are considerable units of the original installation of steel pipe serving in the company's system, are there not?

A. Oh, yes, a very large part of them.

Q. I will ask you this question, Mr. Freese: What was the type of pipe used before the advent of modern steel pipe?

A. Wrought iron and cast iron.

Q. There are quite a number of old cast iron systems in the United States, are there not?

A. Yes, both in this country and abroad.

Q. Are you familiar with the age of any installation of cast iron pipe?

A. Yes.

Mr. Griffith: Well, now, we object, if Your Honor please, to any testimony as to the age of cast iron pipe, for the reason that there is not a single foot of cast iron pipe involved in the public service plant and property represented by these eight volumes.

The Court: I can't see the materiality of showing anything about cast iron pipe any more than copper pipe.

Mr. Fitzhugh: It may follow to some extent the mortality of steel pipe. That is what I was going to ask the witness.

The Court: I sustain the objection.

Mr. Fitzhugh: All right, sir.

Q. Now, in working out your curve as shown on page 11, [fol. 3098] or, rather, in working out your curve as shown on page 12, for the historic replacements and abandonments by years, you included not only the pipe replacements on Line "J" and Line "C", but the replacements, no matter for what purpose, through the years, did you not?

A. That is correct, except the ones, of course, involved in major removals where the pipe was not thrown away.

J. A. Phillips, was recalled by plaintiffs, and testified as follows:

Direct examination.

## Questions by Mr. Fitzhugh:

Q. You are the same Mr. J. A. Phillips that we have seen before in this case, are you not?

A. That is correct.

Q. Mr. Phillips, from the examination of the company's books and records are you able to state how the company was financed?

A. Yes.

Q. How were the funds raised, historically, to finance the Lone Star Gas Company's business and property?

A. You mean during its period of growth and develop-

ment?

Q. Yes. Or perhaps we had better start this way: The only securities outstanding at the present time are rep-[fol. 3099] resented by an issue of common stock. Am I correct in that?

A. Yes. If you mean capital securities, that is true.

- Q. About how many shares of common stock are outstanding?
  - A. 540,000 no par value shares.

Q. No par common stock?

A. That is correct.

Q. And the company has outstanding no preferred stock or bonds; is that correct?

A. That is correct.

- Q. Are all the shares of common stock voting stock?
- A. Well, I believe that they are. They are all of the same class.
- Q. Now, those 540,000 shares of common stock represent the whole capital of the company, do they not?

A. The whole capital stock of the company?

Q. Yes.

A. Yes, sir.

Q. Now, how was the money raised, historically, to

finance the building of the company's properties?

A. Well, the funds were provided by the issuance of capital stock for cash or property, by the borrowing of money, by the use of accumulated and undistributed earnings, and by the use of the depreciation reserve.

Q. Now, Mr. Hulcy, who has testified heretofore, has estified that he did not know the exact amount of propfol. 3100] erty and money put in as capital stock. Were you able to tell from your examination of the books that

mount, Mr. Phillips?

A. Our examination of the books disclosed that there was paid in by stockholders the sum of \$12,500,000.00,

ither in cash or property.

Q. Now, then, in addition — the \$12,500,000.00 that was actually paid in for capital stock, you say there were additional amounts provided by the use of depreciation reserve funds and surplus; is that correct?

A. That is correct, and borrowed money.

Q. What was the amount of money raised out of surplus?

A. I don't have that figure in mind exactly. The capital structure of the company today—that is, I mean the sum set aside as being representative of the no par shares of stock is something in excess of twenty-eight million dollars. That includes an allocation of surplus earnings and, I believe, an allocation of revaluation surplus, and the surplus amount now shown on the books is in the neighborhood of eight or nine million dollars.

Q. Now, then, what is the amount that has been provided and which has been reinvested in building the prop-

erties out of depreciation reserve?

A. I believe the depreciation reserve as of December

31, 1933, was substantially sixteen million dollars.

Q. Now, you were asked a question by Mr. Griffith as [fol. 3101] to whether the books of the company are well kept. I believe your answer to that question was "yes", that they are?

A. That is correct.

Q. You mean by that, do you not, Mr. Phillips, that the financial transactions in the past have been recorded on the company's books so that one looking at the books can now trace the recordings of those transactions?

A. Well, I mean by "well kept" that the books do accurately reflect transactions—that is to say, that no considerable difficulty would be experienced by any one in examining the records of the company to make a determination of what the business and operating result had been. While all the details may not be disclosed on the general books or in the control accounts, subsidiary records have that detail, and it is available. That is what I meant by being "well kept".

Q. Yes, sir. Did your examination of the books disclose that prior to about 1927, 1928 and 1929, along in those years, that the books of the company failed to reflect as a part of book cost the general overheads in connection with

the construction of the company's properties?

A. Yes, that is true. The books did fail to reflect the capitalization of overheads in any appreciable amount. [fol. 3102] Q. Did your examination show that such overheads as were incurred, if any were incurred, were charged to operating expenses?

A. Substantially all of them in prior years; I would say

that prior to 1927 or 1928.

Q. Now, what would be the effect of this system of keeping the books, Mr. Phillips, with reference to the effect it would have on the net profits, the amount of operating expenses and the capital accounts as shown by the books?

- A. Well, of course, if items of property or items of capital expenditure are charged to operating expenses, the effect would be to have the books show less earnings than actually had been experienced and have the property accounts show total sums less than had actually been invested.
- Q. To have an accounting system of this sort, Mr. Phillips, wherein the actual operating expenses would be overstated, the actual capital expenditures under-stated, and the actual profits under-stated, would allow the Company to benefit in the matter of payment of Federal Income Tax, would it not?
- A. Well, if the Treasury Department of the Bureau of Internal Revenue accepted those book costs without verification, it would.

[fol. 3103] Mr. Griffith: They don't do that, do they, Mr. Phillips?

The Witness: Oh, we usually have some controversies with them. (Laughter.)

Q. Oh, yes; one other question in connection with the capital paid in. The original amount paid in at the time the Company first started business was put in in leases and property, was it not?

A. Substantially all of the first payment.

- Q. Practically all of that was in the Petrolia Field, was it not?
  - A. Yes, that is correct.
- Q. The rest of the twelve million, five hundred thousand was paid in in cash, was it?
- A. There may have been some property included in that additional sum; but I would say that substantially it was paid in in cash.
- Q. Now, in the contract with the Railroad Commission made with Hawley, Freese & Nichols, and under which you were employed as an accountant—that is, the firm of J. A. Phillips & Company, along with Smith Rogers-

A. Rogers, Smith & Company.

Q. Rogers, Smith, of San Antonio,—provided, did it not, that you were to be the authorized representatives of the Railroad Commission?

[fol. 3104] Mr. Griffith: Well, now, we will object. The contract would be the best evidence.

Mr. Fitzhugh: All right, sir; I will ask the question in

another way.

Mr. Griffith: However, I have no objection to a recital of

what those gentlemen did.

The Court: I think you are willing to admit, aren't you, that he was the authorized agent of the Railroad Commission and save proving it?

Mr. Griffith: Yes, I think he was.

Q. But under your employment, acting as an authorized representative of the Railroad Commission, you had the right to go in and ask for whatever books and records you wanted to obtain, did you not?

A. I so understood, yes.

Q. So that the Company's giving you the books would not be any particular act of generosity on their part, would it?

A. Well, I never thought of it in that light. I did under-

stand that I had the authority to examine the books.

Q. Nevertheless, you were refused access, were you not, Mr. Phillips, to the books of the Lone Star Gas Corporation kept in Dallas?

[fol. 3105] A. Yes, we were not permitted to examine the

books of the Lone Star Gas Corporation.

Q. You did, however, want to look at the books of the Lone Star Gas Corporation, in connection with the management fee charge made on the books of the Lone Star Gas Company, did you not?

A. I did ask for permission to examine the books of the

[fol. 3106] Lone Star Gas Corporation.

[fol. 3107] S. W. Freese, a witness for plaintiffs, upon being recalled, testified as follows:

## Direct examination.

# Questions by Mr. Fitzhugh:

Q. Mr. Freese, at the hearing had before the Railroad Commission was there there presented data showing the temperatures for the years 1931 and 1932?

A. Yes; not only for the years 1931 and 1932, but the average over a long period of time; in other words, what

the normal temperatures would be.

Q. Did a study of that temperature data show that the

years 1931 and 1932 were normal years?

A. Yes; those varied very little from the normal; taking the two together, they were almost exactly the normal, and it was safe to use those years in predicting future operating results.

[fol. 3108] Q. I asked you first, Mr. Freese, if you had made a comparison as between the year 1933 and previous years.

A. Yes.

[fol. 3109] Q. Now, then, what did that comparison show? A. It showed that 1933 was the warmest year in the history of the operations of the Company.

[fol. 3110] Q. Now, have you prepared an exhibit, Mr. Freese, to show the effect that the temperatures of 1933 would have on revenues and earnings?

A. Yes.

Q. Will you produce that exhibit?

A. Yes, sir. (Witness hands exhibits to counsel.)

Mr. Griffith: We desire to examine the witness briefly, touching the exhibit just rendered, which is styled on the cover "Report on Effect of Degree Day Deficiencies on Revenue and Earnings for Years Ending December 31, [fol. 3111] 1933, March 31, 1934."

The Court: All right.

Examination by Mr. Griffith:

Q. Mr. Freese, the substance of this exhibit is, in effect, found in the summary on page 1, is it not?

A. Yes.

- Q. The revenues shown for the twelve months ended March 31, 1934, are actual, are they not, as far as the 40-cent rate is concerned?
  - A. Yes.
- Q. The same is true for the twelve months ended December 31, 1933.
  - A. Yes.
- Q. Then, have you applied in the next figure the amount of the reduction which would be occasioned by the application of the 32-cent rate?
  - A. That is correct.
  - Q. To-wit, eight cents per thousand cubic feet?
  - A. That is correct.
  - Q. Now, from what source did you obtain these revenues?
- A. From the audit prepared by Mr. Phillips, and that figure appears in the exhibit covering defendant's properties, submitted by Mr. Phillips.
- Q. Did you make any examination of the books, records [fol. 3112] and accounts for the purpose of making this determination?
- A. No, I took that as given in Mr. Phillips' report. However, I think it is almost identical with that given in the Company's exhibits.
- Q. Now, the items of gas purchased expenses, gathering system expenses, compressing station expenses, transmission system expenses, general expenses, taxes other than gross production and Federal income taxes, auto and truck expenses, bad debts and adjustments, miscellaneous non-operating expenses,—are those the expenses which are attributable to Texas or to the over-all property of the Company?
- A. To Texas and/or as they appear, were taken directly from the exhibit introduced by Mr. Phillips.
- Q. Well, do you mean Mr. Phillips' Exhibit 5 or his Exhibit 4?
- A. It is the one covering Texas properties only. I don't happen to have it numbered.

Mr. Fitzhugh: Exhibit 4, is it not?

- A. Yes; it was the first one submitted; it would be No. 4.
- Q. In other words, that is based upon a allocation of expenses, is it not?

A. Yes:

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[fol. 3113] Q. From what source did you get the Texas-Oklahoma Gas Sales Adjustment of \$62,234.07?

A. That is also taken from page 1 of Exhibit 4.

Q. And the figure of \$29,617.92 covering the Texas-Oklahoma gas sales adjustment for the twelve months ended December 31, 1933, is likewise taken from Exhibit 4?

A: Yes.

Q. Now, the depreciation of \$831,946.08 appearing under each twelve months' period, that is your determination as set forth in Exhibit 7, is it not?

A. Yes, and I proposed to make a correction of the \$16,-000.00 in my testimony.

Q. That is subject to an additional \$16,000.00 correction?

A. That is correct.

Q. And that \$16,000.00 correction would serve to reduce the percentages shown at the bottom of each column?

A. Yes.

Q. For the year ending March 31, 1934, and the year ending December 31, 1933?

A. That is correct, and I propose to make that correction.

Q. Now, where did you get the value of Company produced gas—what does that represent?

- A. That is the value of the Company produced gas at the prevailing field price. That is derived from two sources, one of which are the gross production tax statements of the [fol. 3114] Company; it was also checked by our auditors from the books of the Company; and this—if I may explain further, that this method of evaluating the gas at the well-head is identical with the method used by Mr. Hulcy, except that he took all of the future production at the prevailing field price and reduced it back to a capitalized value of that future production, and then applied a rate of return. Now, if he had just taken it as it came—as the gas was produced, it would have given the identical figure which I have used here, and would be identical to the method used by Mr. Hulcy in his determination.
- Q. Included in the figure of \$40,256,862.39, shown in the southwest corner of page 1 of the exhibit just tendered,—is there any inclusion of developed and undeveloped gas leaseholds, gas well construction, gas well equipment, or other production system property?

A. No; and in that respect it also corresponds to Mr. Hulcy's exhibit, because he put it into this appraisal—rather, it was put into this appraisal, and then Mr. Hulcy

deducted it in its entirety in his valuation of leaseholds, and the net result was that it was not included—not one penny

was included in either one for gas well equipment.

Q. Now, Mr. Freese, we will get along much faster if you [fol. 3115] will just answer my questions. I didn't ask you what Mr. Hulcy did. Does the Company actually own developed and undeveloped leaseholds and gas reserves, gas well equipment, gas well construction, and other production system property in the State of Texas?

A. Yes.

Q. Is there any inclusion of any of those capital items embraced in production system property in the figure of \$40,256,862.39 shown in the southwest corner of page 1 of the exhibit concerning which I am examining you?

A. No. However, the \$232,646.75 does provide a return on whatever value there is in that property. Therefore, on the page as a whole, a return on that property has been in-

cluded.

Q. If a return is-can be made out of gas at the field

price,-isn't that what you mean?

A. Certainly, we have taken that the value of the gas at the well-head was what was prevailing in the field at that time, and what the Company was paying other producers in the field at that time.

Q. Now, what is this temperature correction of \$268,829.64 which you apply for the twelve months ended December 31, 1934, and the twelve months ended December 31,

1933?

A. Well, we have worked up the normal temperatures, and and that is explained in detail throughout the rest of [fol. 3116] the body of the report—the normal temperatures for a long period of time covering the Lone Star Gas Company's system. And it is a well known fact that for each degree day of temperature the normal consumption of gas for heating is from sixteen to eighteen cubic feet. And we have applied that correction. Now, that is explained in great detail, every step, in arriving at those figures, in the successive pages.

Q. Well, now, that is the additional consumption which you estimate that the Company—or additional sales which you estimate that the Company would have had over and above what you say would have been normal temperature

conditions, or-

A. No, no; not at all. During any normal year or normal

period in the future or in 1933, this would have been the correction which would have been necessary to have brought it to normal. Now, if it had been colder than usual, it would not have been fair to use the year 1933 to predicate future earnings on, and a reduction would have been necessary.

Q. Is this a gross figure?

A. What do you mean by "gross figure"?

Q. Well, in making your temperature corrections did you allow for the cost of gas purchased and/or produced and the cost of compression?

A. Most certainly.

[fol. 3117] Q. Where are those figures shown?

A. On page 4 is shown the Gain in Net Revenue for Average Temperature Year, Gas at 26 cents. This applies only to domestic gas which would be sold at 32 cents, and we have made a 6 cent deduction for the cost of the gas and of compression, and I have those figures in detail here before me and am ready to testify in respect to them.

Q. Did you take 6 cents as representing the costs of the

gas in the field and the cost of compression?

A. Yes.

Q. Are those the only two items entering into the six cents?

A. No; that includes all of the additional costs which would be incurred by the Company by reason of the increased domestic demand.

Q. All right. What additional costs—give me a breakdown of that 6 cents figure as to the various component items that enter into it?

A. The average price paid by the Company for gas for the year 1933 in the fields where it produced gas was \$.0390 for the year ending March 31, 1933.

Q. That is in Texas?

A. In Texas, yes. For the year ending March 31, 1934, it was \$.0396—slightly less than four cents, The compression charge per thousand cubic feet for the year ending December 31, 1933 was \$.011180. Now that included all of [fol. 3118] the labor, miscellaneous supplies and everything of that sort. The only additional charges for compressing this additional gas would be the cost of fuel for running the engines, largely. There would be little more labor, and very little more of the items entering into the cost other than the fuel itself. Now, the cost of transmission, including all labor of any kind was \$013787, giving a total of

\$024967. Now, that covered the overall cost for compression and transmission. Now, the cost that would have been incurred simply for the compression and transmission of this gas, in addition to that which was already incurred,—that is for this extra amount of gas which would be used if the temperatures should have been normal—would have been very little greater than what was incurred anyway and what is included in the operating expenses. However, we have taken this total cost and added that to the cost of the gas, giving slightly more than six cents; in other words, four cents for the gas at the well-head, and two cents for these costs of transmission and compression; and I think in the Company's testimony in this case, those costs have been estimated—that is, for the additional increment—at considerably less than two cents.

Q. Did you make any examination of the records, books, and accounts of the Company for the determination of these

[fol. 3119] transmission and compression costs?

A. No; they were furnished me by the auditors.

Q. Now, have you related all of the costs that enter into this figure of 6 cents per thousand cubic feet, which you deducted from the 32-cent domestic rate as fixed by the Railroad Commission, and which deduction gives you the figure of 26 cents, which appears in the right-hand column on page 4 of the exhibit you are testifying about?

A. Yes; substantially.

Q. Did you include any gross production taxes?

A. Yes.

Q. Where are they-in what amount?

A. I beg your pardon. We have taken those into consideration in that the field price of the gas which we have used was the field price after the gross production taxes had been paid.

Q. All right. Now where in your six cents is any allow-

ance for gross receipts on sales—gas utilities tax?

Mr. Stout: That tax is not but about one-fourth of one cent, is it?

Mr. Griffith: It is still a tax.

A. No; we have not included that; and that is an omission to that extent. I would have to figure what that would be. However, I must say we figured the actual use per customer per degree day at 18.63; whereas we used a figure of 16.00, so there would be considerable leeway in that

[fol. 3120] respect. I think that would more than offset that

figure.

Q. Look at page 4 in this exhibit, under Cubic Feet Per Customer Per Degree Day Efficiency, you have some asterisks opposite some of the figures, and below a note, "Figure testified by P. M. Biddison—

A. The 16.00.

Q. -Sherman Transcript, page 356?

A. Yes.

Q. As a matter of fact, do you know anything about this exhibit that Mr. Biddison testified to?

A. I certainly do. We worked it out from the records shown in detail, and it came out 18.63, whereas we used the lower figure of 16.00.

Q. Refer to page 5. On that page you have shown a computation of Degree Days Deficiencies at Dallas, Texas, have you not?

A. That is correct.

Q. From what source were those taken?

A. Those were either taken from the exhibits submitted by Mr. Huley before the Railroad Commission, and for the years which he did not cover, as we extended the table considerably further, they are from the Weather Bureau's records.

Q. Did you personally verify the Weather Bureau's records for 1914 or 1915?

A. No; I took those directly from the Government publication.

Q. Did you do the same in respect of Degree Day De-[fol. 3121] ficiencies on page 6 covering the degree day deficiencies at Fort Worth, Texas?

A: No; I took those also from the records of the Weather Bureau, which I have with me here.

Q. All right. On page 7, where did you get those?

A. Those were from the Weather Bureau's records.

Q. Is the same true of pages 8 and 9?

A. The same is true of Abilene on page 8, and of Sherman on page 9.

Q. Now, there is a wide variance in degree days of deficiency as between Sherman, Texas, and Waco, Texas, is there not?

A. That is correct; and we have the actual meters covered by by the places where we have these temperature mea-

surements, constituting over half the meters. However, we weighed these out strictly in accord to the number of meters in each town.

Q. Except for these five places—Dallas, Fort Worth, Waco, Abilene and Sherman,—you made no determination

of the average daily degree days of deficiency?

A. No; they correspond very closely. However, that covers over half of the customers, and we have weighed them out. In other words, we weighed Dallas in there more than Sherman; we took the actual number of customers at each place and weighed the degree days of deficiency accordingly.

[fol. 3122] Q. Now, Wichita Falls, and the territory off Line A in the northwestern part of the Texas system, that represents a very sizeable part of the company's business,

doesn't it?

A. Yes; we checked the records there, and the trend there is exactly the same as these other places; and I have the records for Wichita Falls here with me now.

Q. You did not take into consideration any degree day deficiencies as determined for the Wichita Falls Area, did

you?

A. We checked it to see if it made any difference in our figures. We took what we considered a representative cross section of the system as a whole.

Q. Did you make any determination of degree days of deficiency for any part of the territory south and south-

east of Waco, Texas?

- A. No; there is very little territory—very few consumers south and east of Waco. I consider that this is as representative a study as has been made covering this matter of the Lone Star Gas Company's system.
- Q. Refer to page 14. You purport to show on that page Net Profit before Federal Income Tax?

A. Yes.

Q. Now, then, you add to that amount the Depreciation as per your schedule, \$831,946.08?

A. That is correct.

Q. And, of course, you stated you are about to make a [fol. 3123] correction to that by adding \$16,000?

A. That is correct.

Q. Now, the actual depreciation expressed as a percentage, as determined by you is 2.16 per cent in relation to the

reproduction cost new of the property, evaluated in Plaintiffs' Exhibit 6, is it not?

A. That is correct.

Q. But when you come to make your determination for Income Tax calculations you deduct 5 per cent for de-

preciation, do you not?

A. Yes. You can't tell exactly what the Government would allow on that; but that is from my best information as to what they would allow; and that is the amount used by Mr. Hulcy, except he based his on the book cost, rather than on the appraised cost.

Q. But where you are actually allowing only \$848,000 for depreciation, is it your contention, Mr. Freese, that 5 per cent would be allowed for depreciation in connection with

Income Tax calculations?

A. That is correct.

Q. And by that method you have determined the Income Tax was \$97,534.45?

A. The theoretical Income Tax. What they actually paid—

Q. Do you know what the actual Income Tax was for the calendar year 1933, as contrasted with the figure of

\$96,073.64 that you used?

[fol. 3124] A. It was somewhat more than that; but it was based on a 40-cent gate rate, rather than a 32-cent gate rate, as herein used. I think these computations conform to Mr. Hulcy's computations for Income Tax.

Mr. Griffith: Yes, sir. If the Court please, we object to the introduction in evidence of the exhibit which has just been tendered by the witness Freese and styled "Report on [fol. 3125] Effect of Degree Day Deficiencies on Revenue and Earnings for Years Ending December 31, 1933, and March 31, 1934," for the following reasons:

First, that the exhibit so tendered, and the data and information therein set forth, are irrelevant and immaterial, and not competent for the purpose of proving any issue as made by the pleadings in this case.

Second, that the exhibit and the data and information therein contained do not purport to be based upon the actual revenues and expenses of the Company for any particular accounting period of twelve months, whether it be for the calendar year of 1933, or for the twelve months period ended March 31, 1934.

The Court: Go back and state that objection again.

Mr. Griffith: That the exhibit does not purport to be based upon any study by this witness of the books, records and accounts of the Company, or to be based upon the actual revenues and expenses of the Company for the calendar year of 1933, and the six months ended March 31, 1934; and to that extent is purely speculative and theoretical.

The Court: Mr. Freese, is his statement correct, that that

is not based upon an accounting study?

A. It is based on a study of those two specific calendar [fol. 3126] years, and all my figures for revenues and expenses were taken directly from the actual operating revenues and expenses shown both in the Company's exhibits and in our exhibits.

The Court: I have asked that question for my information.

Mr. Griffith: We object for the further reason that the value of Company gas produced, as shown on page 1 of the exhibit so tendered, is a computation of the witness based upon what he considers to be the market price in that field for gas produced by the Company, including gross production, compression, and transmission charges; and for the reason that it is grossly improper to make any determination in respect of the developed or undeveloped leaseholds, the gas well equipment, gas well construction of the Company, and other production system property, which does not take into account the actual present fair value of the property used and useful in the matter of producing that gas; and next, for the reason that, as a matter of law, the computation of Federal Income Tax, as made by the witness, is upon a basis which is not in accordance with the Federal Income Tax Law, the witness having applied a depreciation allowance in connection with the computation of Income Tax in the amount of five per cent, whereas. he has only allowed the sum of \$848,000 for depreciation [fol. 3127] in connection with his determination of net amount available for return.

Objection is further made to the introduction of the exhibit, and to any evidence or testimony which may be given by the witness in aid or in explanation of the so-called exhibit, because the percentages of return, expressed as 6.74 per cent for the Twelve Months Ended March 31, 1934, and

expressed as 6.76 per cent for the Twelve Months Ended March 31—December 31, 1933, I mean—do not appear as an expression of a percentage of a value or property which includes the leaseholds developed and undeveloped, the gas well construction, gas well equipment, and other production system property which the Company actually owned and was used and useful in the public service during the period from January 1, 1933 through March 31, 1934.

We further object to the introduction in evidence of the exhibit which purports to show Degree Days of Deficiency for the periods stated, to-wit, for the year ended December 31, 1933, and the twelve months ended March 31, 1934, because it purports to show and reflect that which in truth is not the fact, this being a case wherein the constitutionality of the Commission's order fixing a rate of six per cent as the minimum net return is applicable, the constitutionality test to be applied is the actual result of the [fol. 3128] operations which did happen, and not that which might have happened.

Mr. Shannon: May I supplement those objections with some additional ones?

The Court: Yes, sir.

Mr. Shannon: We further object to the determination of the amount which the witness has included on page 1 of his exhibit as covering an addition for temperature correction, because the determination of this amount involves a determination of conditions which might have existed, but which did not actually exist, and involves speculation as to those conditions, and involves an invasion of the province of the jury, in any event, which may ultimately be called upon to determine whether or not any correction should be made for temperature conditions.

We further object to the manner in which the witness has treated the value of Company produced gas, and the failure of the witness to incorporate in this exhibit, or in the amount of \$40,256,862.39, being the amount shown on page 1—I have lost the thought—go back—the failure of the witness to include in that amount the present fair value of the production system property of the Company, because the manner in which the witness has treated this item by this elimination results in varying the findings of the [fol. 3129] Commission, which findings did include an amount to cover this element of value, and involves chang-

ing the method upon which the Railroad Commission of Texas reached its determination of the final value of the property, and the plaintiffs are estopped in this case to proceed on the theory upon which they are undertaking to proceed.

The Court: The objections are overruled. Bring in the

jury.

Mr. Griffith: Note our exception.

[fol. 3130] (Thereupon the Report on Degree Day Deficiencies, above referred to, was marked as Plaintiff's Exhibit No. 8.)

Q. Turn to the first page inside the title cover of your Exhibit 8, which has just been introduced. You there show a table of contents, do you not?

A. That is correct.

Q. Turn now to the first numbered page and explain to the jury what you show there.

A. The first item coming under the head of Revenues-

Q. First, what is this page, Mr. Freese?

• [fol. 3131] A. This page shows Amount Available for Return at 32 cent Domestic Gate Rate after correction to Normal Temperatures for the years ending December 31, 1933, and March 31, 1934.

Q. And you show that calculation in two columns, do you

not?

A. Yes, one for the year ending December 31, 1933, and the other for the year ending March 31, 1934.

'Q. Now, beginning with Revenues, explain the tabula-

tion you have there by items.

A. The revenues at the 40 cent domestic gate rate in the amount for the year ending December 31, 1933, of \$7,423,680.87, and for the year ending March 31, 1934, in the amount of \$7,663,034.50, are the actual revenues which were received by the company for those two periods. Now, the next line shows what the eight cent reduction—that is, the reduction from the 40 cent city gate rate to the 32 cent gate rate promulgated by the Railroad Commission—would have amounted to. During the year ending December 31, 1933, the domestic sales of gas in Texas were 13,380,727 thousand cubic feet, which, at the eight cent reduction, would have made a reduction of \$1,070,458.16, and for the year ending March 31, 1934,

would have made a reduction of \$1,106,537.68. Now, the next head shows what the company would have received during those two accounting periods if the gas had been sold at the reduced rate of 32 cents. For the year ending December 31, 1933, they would have received \$6,353,222.71, and for year ending March 31, 1934, there would have been received [fol. 3132] \$6,556,496.82. I think that covers the explanation of what the revenues would have been at the 32 cent rate.

- Q. Now, take up the expense items and explain those to the jury.
- The expense items, starting with Gas Purchased, in the amount of \$1,071,170.87 for the year ending December 31, 1933, on down through Miscellaneous Non-Operating Expenses, were the expenses actually incurred by the company in connection with all their operations, except the management fee paid the Lone Star Gas Company, and what are known as production expenses—in other words, expenses in connection with the production of the gas and the delivery of the gas to the well head. These expenses, along with the Texas-Oklahoma gas sales adjustment, were taken from the figures furnished us by Mr. Phillips and which have been testified to by him. Now, this Texas-Oklahoma gas sales adjustment represents the selling price in Texas of the excess gas which came out of Oklahoma-in other words, the gas over the total usage of all of Oklahoma; that gas was given at the State line or at Petrolia or at Gainesville, as the case might be, the full sales value of the gas delivered That accounts for the \$29,617.92 Texas-Oklahoma gas sales adjustment for the year ending December 31, 1933, and the \$62,234.07 for the year ending March 31, 1934. Deducting these expenses from the revenues given for the year ending December 31, 1933, \$3,420,665.19, and for the [fol. 3133] year ending March 31, 1934, \$3,608,172.77.
- Q. Now, Mr. Freese, just to make clear what you did, what was the deduction that you made to get this figure you just read?
- A. Well, the expenses deducted for the year ending December 31, 1933, were \$2,932,557.52. Deducting this amount from the revenues at the 32 cent domestic rate—domestic gate rate, or what the revenues would have been at the 32 cent rate, in the amount of \$6,353,222.71, leaves \$3,420,665.19, which is the net amount left after deducting the expenses set

forth from the revenues at the 42 cent rate. A similar procedure was followed for the year ending March 31, 1934.

Q. All right. The next item is Depreciation.

A. The next item is Depreciation, which is taken from the exhibit which I explained this morning, and is taken at \$831,946.08 for each accounting period. Now, that has not been corrected in the amount of the \$16,500.00 which I testified it should be corrected to.

Q. That is, to this \$831,946.08 should be added \$16,500.00?

Yes. Now, the correction of the \$16,500.00 would mean that the return given in the last column at the bottom of the page would be lowered from 6.74 per cent to 6.70 per cent for the year ending March 31, 1934, and would be lowered for the year ending December 31, 1933, from 6.76 per cent to 6.72 per cent. The next deduction is that of [fol. 3134] Value of Company Produced Gas. Star Gas Company produces only some one-fifth of all the gas sold by it. It buys the other, the gas which it does not produce, which amounts to 80 per cent, approximately, from other owners. We have valued this gas at the well heard at exactly what the Lone Star Gas Company would have had to pay and was paying other owners in the gas fields at that time; in other words, if you take the amount of gas produced by it and multiply it by the prevailing field price which they were paying to other owners and according to the basis they were paying as royalty, you would arrive at, for the year ending December 31, 1933, \$212,031.46, and for the year ending March 31, 1934, \$232,644.75. Now, this figure will compensate the company for the actual expenses incurred by it in producing this gas and will also give them a return on the actual value of that property; in other words, the value of a property of this sort would be determined by deducting from the current sales of this gas the operating expenses; that would be the return on the investment in those production properties. Now, that method is similar to the method used by Mr. Hulcy, but Mr. Hulcy predicted what the revenues would be in the future. He capitalized that on a present worth basis and then he figured a return on that, which is the same operation, except that it is not as simple as this return is here, by simply taking the actual amount. of gas produced and applying the well head price to the gas. [fol. 3135] Q. Your method avoids, does it not, Mr.

Freese, the necessity for predicting what the future withdrawals will be by years?

A. It not only avoids that, but in the case of Mr. Hulcy

he capitalizes these future earnings.

Mr. Griffith: Now, we object to that, if the Court please. The witness expressly said he did not capitalize future earnings. The witness specifically stated that he was showing what the recovery values would be, and this witness is not shown to be an accountant to pass judgment upon the testimony of Mr. Huley.

Mr. Fitzhugh: It has been testified to here-

The Court: Wait a minute. You can not prove by this witness what some other witness testified. It would be admissible only to prove it when he is attacked, as in the case of impeachment. You are not attempting to do that, so I sustain the objection.

Q. All right.

A. The resulting figure for the year ending December 31, 1933, of \$212,031.46 compensated the company that year for the gas actually produced—compensates them including both operation expense and production cost and gives them a return on whatever the value of the property actually is.

Q. Does that complete your explanation?

A. Yes. Now, taking the value of the company produced gas, or, rather, allowing them these sums and deducting that amount from the sub-totals previously found, leaves [fol. 3136] \$2,376,687.65; that is the net amount for the year ending December 31, 1933, and \$2,543,581.94, for the year ending March 31, 1934.

Q. The next item is Temperature Correction. Will you please explain that?

A. The year 1933 was the warmest year in the history of the Lone Star Gas Company's operations. Now, the amount of heating load varies directly with the temperatures below 65 degrees. The consumer demand for heating gas is between 16 and 18 or 19 cubic feet per day for each degree below 65; in other words, if the temperature is 60 during the day, the average consumer will use five deficiencies below 65 degrees times this figure of, we will say, 16; in other words, they would use 80 cubic feet of gas. Now, we have taken for Dallas, Texas, the temperatures, or, rather the degree day deficiencies—that is, the number of degrees per

day that the temperature dropped below 65—for each year beginning with 1914, clear up through 1933. The way that is determined is by the Weather Bureau records issued for Dallas, Texas, the daily temperatures, both maximum and minimum. Here, for example, in Dallas on June 1, 1915, the maximum temperature was 81 and the minimum temperature was 59. The total of those two is 140; the average temperature was 70 degrees. Well, now, there would be no gas used for heating the houses then, because the temperature was higher than 65 degrees. We have taken the average [fol. 3137] age between the maximum and minimum and checked each day during the years 1914 to 1933 for Dallas.

Q. On what page do you show the degree days for deficiencies for Dallas?

A. That is shown on page 5. Now, for the years 1921 to 1933 we took the degree days as submitted by the company in the hearing before the Railroad Commission, and we checked those with the temperatures shown by the Weather Bureau records. It shows for the twenty-year period ending in 1933 the average number of degree day deficiencies was 2,326. For the year 1933, however, they were only 1,850. Now, for the years 1932 and 1931 we have 2,477 and 2,183. Now, the average for those two years, which were considered by the Railroad Commission, is substantially normal. Similarly, for Fort Worth, we took the records beginning in 1909 through the year 1933.

Q. That is shown on page 6, is it not?

A. Yes. Now, the average over the twenty-five years covered was 2,323. For Waco we have a twenty year average of 2,075.

Q. That is on page 7?

A. Page 7. On page 8 we have 2,573 for Abilene. On page 9 we have 2,498 as a fifteen-year average for Sherman. Now, the big load of the company is at Fort Worth and at Dallas. We also show Abilene, which is out at this point [fol. 3138] here (indicating on map). We took Waco, which is in this area here, and we took Sherman, which is in this area here. However, we did not average those towns. What we did was to weigh the temperatures or degree day deficiencies, in accordance with the number of meters at these towns in the year 1933. There were 65,000 at Dallas, at Fort Worth, 33,000; at Waco, 10,000; at Abilene, 6,000, and at Sherman, 4,000. The weighted yearly average of the

daily deficiencies below 65 degrees was 2,322 for the system as a whole, considering those towns and the meters in each town as representative of the system as a whole. For the year 1932, however, the temperature averages for those was such that the deficiencies below 65 degrees were only 1782.

[fol. 3139] Page 10 takes the findings for each one of the separate towns—that is, Dallas, Fort Worth, Waco, Sherman, and Abilene—and it combines those figures so as to show the weighted average for the system as a whole, that is, weighting each town in accordance with the number of meters in the towns. It shows that the yearly average weight for the system as a whole is 2322 degrees below 65. [fol. 3140] That is multiplied by the number of days. That for the year 1933, however, the deficiencies amounted to only 1782 degrees, such that the year 1933 was warmer as measured by the degree day deficiencies in the amount of 540, or an average for the year 1933 of 1782. Now, on page 11—

- Q. Wait just a minute before you go to page 11.
- A. Yes, sir.
- Q. On page 10 in several places you have "DDD"; what does that stand for?
- A. That stands for Degree Day Deficiencies. In other words, if the average temperature of a day was, say, 60 degrees, that would mean 5 degree day deficiencies. In other words, that 5 would be a measure of the amount of heating load that would be used per customer for that day, because they start using gas at 65 degrees. Now, nowhere in this exhibit have we made any modification of the industrial load or of the domestic load which is used for cooking and water heating or for the small industries. In other words, this simply takes care of the variations in the house heating load.
- Q. All right. Now, turn to page 11. What do you show on that page?
- A. Pages 11 and 12 show the similar computations for the year ending March 31, 1934. Now, for that period the deficiency was only 329 degree days as compared with the 540 [fol. 3141] as found for the year ending December 31, 1933.

Although those periods overlap each other nine months, the period ending March 31, 1934, was very quickly getting back to normal temperatures. Page 13 shows our computations of the amount of gas used for space heating or house heating per domestic consumer per degree day of deficiency. In the first column we show the years 1927 to 1933, inclu-In the second column we show the domestic gate sales in thousands of cubic feet. In the next column we show the domestic consumers for June of each one of those years. In the next column we show the thousands of cubic feet of consumption per customer per month, the average being 3.13. Now, during the month of June there was no space heating load, so that the remaining figure during that month would show what the consumption was for cooking and for water heating, and such as that. We have made similar computations for July, for those seven years, showing that the cooking load and such as that for July was 2.83; for August we find that to be 2.76 M, or thousand cubic feet. were used per customer per month. Now, the average for those three months is 2.91 thousand cubic feet per domestic customer per month; and that would be the cooking load, which would go on throughout the year. The total domestic gate sales in Texas in 1933 were 13,380,727 thousand cubic feet. Now, if we multiply the average number of customers [fol. 3142] by this monthly use for cooking, and including the small industrial load which takes the domestic rate: multiply that by the twelve months of the year, we find for 1933 they would have used 6,859,021 thousand cubic feet, leaving for space heating or house heating 6,521,706 thousand cubic feet. Now, we divided that by the number of customers and by the number of degree days deficiency during 1933 and it worked out 18.63, as determined there. We used 16.00, that having been the amount testified to by the Company in a previous rate hearing.

- Q. You did that, did you not, simply to eliminate any differences that might be between you and the Company?
- A. Simply to play safe. Now, multiplying that usage by the number of customers, by the amount of the deficiency in 1933 of 540, and of 329 for the year ending March 31, 1934, we found as set out on page 4, that using the 16.00 foot usage, that for the year ending December 31, 1933, the earnings were off \$441,240.12, by reason of these warm temperatures. However, if we had used the 18.63 determined

on page 13, the amount would have been \$513,568.97. ever, we have used the \$441,240.12, and that is carried forward to page 1 and shown for the year ending December 31, 1933, for the temperature correction for that year. Now, for the year ending March 31, 1934, which was a cold year, and more nearly normal, using the 16.00 cubic feet per customer per day per degree of deficiency, we arrive at a [fol. 3143] figure of \$268,829.64, and that also has been carried forward to page 1, where the temperature correction in that amount is shown. Now, if we had used the 18.63 per customer per degree day deficiency, we would have \$313,-018.52, instead of \$268,829. Now, making this temperature correction, we find for the year 1933-and which would be true for any year when the temperatures were normalthat the earnings at the 32-cent rate, and before deduction for Federal Income Tax, would have been \$2,817,927.77; and in almost identical amount for the year ending March 31, 1934, being \$2,812,411.58.

- Q. Now, just to make clear how this degree days of deficiencies are worked out, suppose for a 24-hour period, Mr. Freese, you had a high of 70 degrees, and a low of 60 degrees; but that the mean or the average temperature for the 24-hour period was 68 degrees, that being above 65 degrees there would be no degree day deficiencies for that day, would there?
- A. And no gas for space heating or house heating would have been used.
- Q. On the other hand, assuming the same extremes for the high and low temperatures, if the average had worked out to be 62, that being 3 degrees below the 65 point, what would be your degree day deficiencies?
- A. It would be 3, and the average domestic customer would have used 48, or 3x16 cubic feet of gas for house heating.
- [fol. 3144] Q. Now, doing that same sort of thing each day and adding up the total number of degree day deficiencies for the entire year would give you the degree day deficiencies for any one year?
- A. Yes. Now, there is one other way of arriving at it, and I have checked these figures by that method for a period of time, 1931 and 1932, when the temperatures were about normal, the domestic load stayed the same; when the weather

got warmer, for the year 1933, the revenues dropped off jus about one million dollars.

Q. Is there any other explanation that needs to be mad to explain temperature correction?

A. I think that explains exactly how we have gon about it.

Q. Now proceed to Federal Income Tax explanation.

A. In arriving at the Federal Income Tax we have taken the figure just arrived at, and added back to that the depreciation which we allowed, that being the depreciation figure on a sinking fund basis; then we have deducted from that the depreciation which the Federal Government would actually allow; then we have deducted from that the credit for interest payments which the Government also actually allows and is just as much a part of the Law as the 13% percent charge or percentage is.

Q. The detail on this is shown on page 14?

A. Shown on page 14. And then applying that 13% [fol. 3145] per cent, we find for the year ending December 31, 1933, that the Income Tax would have been \$96,073.64 and for the year ending March 31, 1934, \$97,534.45. Then deducting these amounts as allowance for Federal Income Tax we find the net earnings for return to be \$2,721,854.13 for the year ending December 31, 1933; and for the year ending March 31, 1934, \$2,714,877.13. Now, those amounts equal a return on the reproduction cost new of \$40,256, 862.39 as found by me, of 6.76 per cent for the year ending December 31, 1933, and 6.74 per cent for the year ending March 31, 1934; and if the correction be made to depreciation in the amount of sixteen thousand dollars, which I testified should be made—

Q. Sixteen thousand five hundred dollars.

A. Sixteen thousand five hundred dollars approximately the return to the flearest hundredth of a point would be 6.72 per cent for the year 1933, and 6.70 per cent, or al-ost identically the same amount for the year ending March 31 1934.

Recross-examination.

### Questions by Mr. Griffith:

Q. Mr. Freese, would you have any objection to having the Court Reporter write across Plaintiffs' Exhibit 8 the words, "Covering Texas Operations Only."?

- A. No; I think that would be proper.

  [fol. 3146] Q. As a matter of fact, Plaintiffs' Exhibit 8 only purports to cover Texas operations, doesn't it?
  - A. That is correct.
- Q. And in order that the exhibit may be better identified for that which it is, you are agreeable to the Court Reporter so doing?
  - A. Yes.

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Q. Mr. Freese, now refer please to page 1, Plaintiffs' Exhibit 8. The revenues shown for the 12 months ended March 31, 1934 and the 12 months ended December 31, 1933 are the actual revenues overall, are they not, or are they the revenues applicable only to Texas Operations?

A. They are the revenues applicable only to Texas Operations.

Q. The next figure, "Amount of 8¢ Domestic Gate Rate Reduction", is that 8 cent reduction applied to the volume of domestic sales which you include in Texas Operations only?

A. Yes; however, the Texas-Oklahoma gas sales adjustment was based upon the actual sales price, and was not corrected for the change to the 32-cent gate rate, and I should—or this figure of the Texas-Oklahoma gas sales [fol. 3147] adjustment if corrected to that 32-cent domestic rate would show slightly more revenues than this does show.

Q. Wouldn't it show slightly less revenues?

A. Well, I should put it this way: If the Texas-Oklahoma gas sales adjustment were made to conform to the 32-cent domestic gate rate, then the expenses would have been decreased.

Q. To the extent of that adjustment?

A. Yes; and the net revenues and earnings would have been increased in the amount of that adjustment.

Q. Now, the Gas Purchased Expenses, Gathering Expenses, Compressing Station Expenses, Transmission System Expenses, General Expenses, Taxes Other than Gross Production and Federal Income Taxes, Auto and Truck Expenses Underdistributed, Bad Debts and Adjustments, and Miscellaneous Non-Operating Expenses, were those all taken from Mr. Phillips' Exhibit Number 4?

A. Yes.

[fol. 3148] Q. You copied those in their entirety from Mr. Phillips' Exhibit 4, in so far as they referred to the twelve months ended March 31, 1934, and the twelve months ended December 31, 1933?

A. That is correct.

Mr. Fitzhugh: Mr. Griffith, pardon me; you said "miscellaneous non-operating revenues"; you meant expenses, didn't you?

Mr. Griffith: Did I say "revenues". I did mean expenses, of course.

- Q. You so understood, Mr. Freese?
- A: Yes.
- Q. Now, the Texas-Oklahoma Gas Sales Adjustment for the twelve months ended March 31, 1934, and for the twelve months ended December 31, 1933, is likewise taken from Mr. Phillips' Exhibit 4—that is, Plaintiffs' Exhibit 4?
  - A. That is correct.
- Q. Now, the depreciation figure which you have corrected, in the amount of \$16,500.00, by adding that amount to it, is your own determination as set forth in Plaintiffs' Exhibit 7, is it not?
  - A. Exhibit 7, yes.

Q. And the value of the Company produced gas is your [fol. 3149] own determination, is it not, and not a determination by Mr. J. A. Phillips?

A. That figure was checked for us by the auditors. However, that figure is identical to the Company's, and the amount shown by the Company in its reports, where it pays its gross production taxes.

Q. Now, Mr. Freese—Mr. Phillips and Mr. Hulcy included in operating expenses management fees paid for services rendered by the Lone Star Gas Corporation to the Lone Star Gas Company, did they not?

A. They set forth what the amount would be, yes, or was actually paid.

Q. And didn't Mr.-Phillips include management fees in his comparative statement of earnings, as set forth on page 1 of Plaintiffs' Exhibit 4?

A. Yes, he set forth what the amounts actually paid by the Company were. However, he expressed no opinion as to whether they were properly included or not. He simply said that the books reflected that amount as having been paid. Q. Did Mr. Phillips include management fees and expenses for each twelve months period beginning with the calendar year of 1929 and running through the twelve months ended March 31, 1934, as reflected by his summary of revenues, expenses, and net earnings appearing on page [fol. 3150] 1 of Plaintiffs' Exhibit 4?

A. Yes, he sets forth the amount actually paid to the Lone Star Gas Corporation by the Lone Star Gas Company

as reflected by the books of the Company.

Q. Now, as I understand your testimony, in lieu of allowing the Company a return and depreciation and depletion on production System Property, such as gas wells, gas leaseholds developed and gas leaseholds undeveloped—you have merely applied on page 1 of Exhibit 8 the field price for the volume of gas produced by the Company from its own leaseholds?

A. Yes; and what it could have bought that gas for from other owners.

Q. That figure is shown to be \$232,000.00, plus, for the twelve months ended March 31, 1934, and \$212,000.00, plus, for the calendar year of 1933?

A. Yes.

Q. Do you have before you a copy of Mr. Phillips' Exhibit 4?

A. Yes.

Q. Now, as I understand your testimony, the allowance which you have made for the value of Company produced gas is adequate to provide for depreciation on equipment, depletion of gas wells, and return on investment in con-[fol. 3151] nection with the Company's próduction system property?

A. No, I don't know that I made that statement in those exact words. What I did was, and what the exhibit purports to show is that that was the value of the Company produced gas, and is intended to compensate the Company for just exactly those things which you compensate the other owner for when you pay the prevailing field price at

the well-head.

Q. As a matter of fact, Mr. Freese, didn't you tell this jury this morning that your allowance in the value of Company produced gas as set forth in the two columns on page 1 of Plaintiffs' Exhibit 8, was sufficient to provide for depreciation, depletion and return on the Company's production system property?

A. Yes, but I didn't say it was sufficient to provide a return on their investment. It may or may not be.

Q. Well, let's see whether it is actually. Will you refer to page 1 of Plaintiffs' Exhibit 4?

A. Yes, I have that before me.

Q. Taking the twelve months period ended March 31, 1934, as shown by Mr. Phillips, what are the producing expenses of the Company?

A. \$30,506.28.

[fol. 3152] Q. And what are the gross production taxes of the Company applicable to its own production?

A. \$3911.56.

Q. What are the drilling tools expenses underdistributed?

A. \$3600.58.

Q. What are the dry holes—or what was the dry hole expense of the Company?

·A. \$18,430.03.

Q. And what was the canceled and surrendered leases expense of the Company?

A. \$166,304.21.

Q. Now, what is the total of the five items which you have just read? A round figure will suffice, Mr. Freese.

A. Yes; well, I will have it exactly in a minute. (Witness makes calculation.) That is \$222,752.60. Now, however, I don't think that that is a fair comparison, because this dry hole expense and the canceled and surrendered lease expense of \$174,000.00, has not been in any way correlated to the actual production in this particular year.

Q. As a matter of fact, though, Mr. Freese, these are the production system expenses which are detailed by Mr. Phillips in his column headed 3-31-1934, on page 1 of Plain-

tiffs' Exhibit 4, are they not?

[fol. 3153] A. This \$166,304.21—canceled and surrendered lease expense was not money actually paid out in the year ending March 31, 1934; it was money that had been paid out during many previous years and was simply charged up on the books for that year. Now, it is entirely possible that that was expense, and it was the expense largely incurred by the Company in the development of four hundred billion cubic feet of gas; whereas, there was only actually five billion cubic feet of gas used in the year 1934.

Q. Have you finished your answer?

A. Yes, I have finished my answer now.

Q. But there was actually charged off as expenses by the Company for canceled and surrendered leases in the year—for the twelve months ended March 31, 1934, in the amount of \$166,000.00?

A. That is correct; and if the policy of the Company had so dictated, they could have made it a thousand or four hundred thousand dollars just as easily.

Q. For the previous year, what was the canceled and surrendered lease expense?

A. \$176,139.67.

[fol. 3154] Q. And for the year prior to that—the year 1932?

A. \$245,103.65.

Q. So each of the years prior to the twelve months ended March 31, 1934, as far as canceled and surrendered lease expense was concerned, was in excess of that for the twelve months ended March 31, 1934?

A. Yes. However, for the year 1930 it was only \$67,-

000.00, and for the year 1929 only \$61,000.00.

Q. Yes, and for the year 1931-

A. \$232,271.16.

Q. Or an amount approximately four times the expense for 1930 and 1929—

A. That is correct.

Q. Now, the total of the expenses in connection with the production system property which you have detailed add to approximately \$222,000.00, do, they not?

A. \$222,752.00.

Q. Well, we will use the round figure \$222,000.00?

A. That is correct.

Q. - isn't that so?

A. That is correct.

Q. Now, you have allowed for the value of Company's gas produced in the twelve months ended March 31, 1934, in the amount of \$232,000.00, plus?

A. That is correct.

[fol. 3155] Q. So that leaves approximately \$10,000.00 difference, does it not; in other words, if we deduct—

A. The mathematical difference between those two figures—

Q. Is \$10,000.00?

A. —is \$10,000.00.

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Q. Very well. Now, will you refer please to the last page in Mr. Phillips' exhibit-Plaintiffs' Exhibit 4, the page number being page 11? What is shown by Mr. Phillips on that page to be the adjusted book cost of the Production System Property, including leases?

A. That can not be determined exactly from this sheet, by reason of the fact that the net additions to the public service property—Texas properties, January 1, 1932, to

March 31, 1934, are not broken down.

Q. Is there any substantial change?

A. There is a change of \$1,500,843.28 for the net additions.

Q. There is a change of a million and a half dollars between December 31, 1931, and March 31, 1934, is there not?

A. That is the correct amount.

Q. Now, what is shown as the value of leases owned by the Company as of December 31, 1931, based on Mr. Phillips' adjusted book cost?

A. Well, I don't know what the value of the leases would be. He shows that.

[fol. 3156] Q. I say, based on his adjusted book cost.

A. He shows that the leaseholds cost originally \$1,-225,946.14; but after they are practically all gone that figure would still be the same.

Q: What does Mr. Phillips show as the adjusted book cost

of mineral rights?

A. He shows the original cost of these rights as \$13,-768.00.

Q. What does he show as the value of gas rights based on the adjusted book cost?

A. He shows not the value, which may be an entirely dif-

ferent thing, but the original cost to be \$21,974.48.

Q. What does Mr. Phillips show for Production System Property—gas farms, adjusted book cost?

A. \$3,038,898.84, as the original cost.

Q. Now, is there any other property listed on page 11 of Plaintiffs' Exhibit 4 which would be included in Produc-

tion System Property?

A. Well, there is the original cost of lands in feε in Clay County of \$27,344.70. Those are probably production properties. Lands in fee in Limestone County, \$3,003.00; those are probably also production properties. There are drilling tools in the amount of \$101,985.03-all of those being the original cost on these items of property.

Q. And all of those items would be included in Produc-[fol. 3157] tion System Property, would they not?

A. Yes.

Q. Now, what would be the approximate total of the adjusted book cost of the Production System Property of the Company in Texas as determined by Mr. Phillips and set

forth on page 11 of Plaintiffs' Exhibit 4?

A. Well, now, there is also included, which I failed to read into the record, the Petrolia Field Account of \$758,619.23. Now, as I have stated before, there was nothing left in that but salvage value. Would you like to have that \$758,619.00 included in this figure?

Q. Mr. Freese, you exercise your own discretion in the matter, either include it or exclude it. A round figure will

suffice, Mr. Freese.

A. The original cost, exclusive of the Petrolia Field Account, is \$4,222,000.00, if my rough addition is correct.

Q. In round figures, \$4,500,000.00 is the actual cash cost to the Company of this Production System Property?

A. That is correct, the original cost.

Q. Mr. Freese, according to your method of computation as used in connection with your exhibit—Plaintiffs' Exhibit 8, isn't it true that according to that method you have al-[fol. 3158] lowed \$10,000.00 for depreciation and depletion in connection with four and one-half million dollars worth of property and also for return?

Mr. Fitzhugh: Now, Your Honor, this four and one-half million dollars worth that he is talking about, isn't value, but original cost.

The Court: I think the witness can answer the question.

A. For that particular year the difference—the mathematical difference between the figure of \$232,000.00 and the figure of \$222,000.00 was \$10,000.00. However, that \$222,000.00 included canceled and surrendered leases in the amount of \$166,000.00 which were involved in the total amount of this four hundred billion cubic feet of gas reserves which have been developed by the Company. And the \$10,000.00 is in no way representative of the return on this property. Now, the method which I have used there is in no wise different from the method used by the Company, although all of this gas well equipment and everything was evaluated, it was then deducted from the valuation made by Mr. Hulcy of the reserves.

[fol. 3159] Q. Have you finished your answer, Mr. Freese?

A. Yes. It was a difficult question to answer, because I don't think it was framed in a way that it could be answered.

- Q. Well, Mr. Freese, possibly you can rephrase my question, but what I in my innocence wanted to know is this: By your method of calculation, as set out in Plaintiff's Exhibit 8, what would there be available to Lone Star Gas Company for return, depreciation, and depletion on the adjusted book cost of its Production System Property, following the method of computation which you have used in the first figure column appearing at page one of Plaintiff's Exhibit 8?
- A. Well, all I can say is exactly what we have done, and that is to allow at the well head the prevailing field price for that gas, just exactly the same price you pay for the 80 per cent of the gas which you bought from other owners and which compensates the other owners for exactly the same thing which this \$232,000.00 is designed to compensate the company for.
- Q. Is your answer, then, that you are unable to make the determination which I have requested?
  - A. Yes.
  - Q. You are unable to make that determination?
  - A. That is correct.
- Q. But if the mathematical calculation which I have asked you to make is correct—that is, you deduct the total of [fol. 3160] the Production System Operating Expenses in the amount of \$222,000.00 from the value of company gas produced in the amount of \$232,000.00 plus, wouldn't you have available for depreciation, depletion, and net return upon the adjusted book cost of the Public Service Property the sum of \$10,000.00?
- A. No. If you deduct the actual operating expenses and production expenses paid out by the company, you would have not only the \$10,000.00 but the \$166,000.00 which you deducted in arriving at the \$10,000.00.
- Q. All right. We will go down the lane that you have set out on, Mr. Freese. Let's add the \$10,000.00 to the \$166,000.00 covering cancelled and surrendered leases. That gives the figure of \$178,000.00, does it not?
  - A. Yes.
- Q. Would that be the amount which the company would have available for depreciation, depletion, return and Fed-

eral income tax on the adjusted book cost of the Production System Properties?

A. That is what they would have available on the fair

value of this property.

Q. Whatever that fair value may be?

A. Yes, and the fair value is determined by the prevailing well head price.

Q. The fair value of what is determined by the prevailing

well head price?

A. Of the Production Property.

[fol. 3161] Q. Well, suppose you had some Production System Properties that disclosed that they had underlying them a vast amount of gas, Mr. Freese, but no gas was marketed during the twelve month period ended March 31, 1934; would that indicate to your mind that thos- Production Properties had no value?

A. No, but if during the history of the company every thousand cubic feet of gas taken out of that property was paid for at the prevailing well head price they would certainly be compensated for the value of that property.

- Q. If we assume that the adjusted book cost of approximately \$4,500,000.00 for the Production System Properties represents the fair value—and that is merely an assumption—under your basis of calculation, would you have \$178,000.00 available for depreciation, depletion, Federal income tax and return on the Production System Properties in Texas?
- A. Yes, but that \$4,500,000.00 is not the fair value of that property by any manner of means.
- Q. Well, just let's figure on cost. \$4,500,000.00 represents the approximate cost, does it not, to the company?
- A. Yes, before there was any depletion or before there was any gas taken.
- Q. Now, if we took the \$178,000.00 which you say would be available for depreciation, depletion, Federal income tax and return on the \$4,500,000.00 of book costs, what would be the percentage of relation of \$178,000.00 to \$4,500,000.00?

A. \$178,000.00 divided by \$4,500,000.00 gives 4 per cent, [fol. 3162] but if that property were half depleted it would

be 8 per cent.

Q. Mr. Freese, in connection with the first report you made to the Railroad Commission of Texas covering the

reproduction cost of the Lone Star Gas Company Public Service Property you also made a report covering depreciation and depletion allowances, did you not?

A. That is correct.

Q. And the volume which I present to you is the volume which sets forth the depreciation and depletion allowances which you informed the Railroad Commission of Texas were correct?

Q. This was presented to the Railroad Commission of Texas, was it not, Mr. Freese?

A. Not in any hearing. We submitted it to them in a

letter.

Q. Included in the volume which I hand you is a letter addressed to the Railroad Commission of Texas under date of May 17, 1932, stating that "In compliance with our Con-[fol. 3163] tract of December 22, 1931, we submit herewith ten copies (six volumes each) of an appraisal of the gas utility properties (in Texas) including a report on the records (1927 to 1931 inclusive) of the Lone Star Gas Company. The appraisal has been made as of December 31, 1931. Respectfully submitted, Hawley, Freese and Nichols."

A. That is correct.

Q. Now, in the report covering both Texas and Oklahoma properties of the company, did you set forth an annual depreciation reserve accrual in connection with

leaseholds and mineral fee lands of \$97,152.83?

A. That is correct. However, as I explained yesterday, Mr. Griffith, this figure of leaseholds and mineral fee lands we took directly from the data furnished us by the company and we included a great number of gas wells in that figure. They were all along with the leaseholds, and that includes allowances for depreciation on those leaseholds. We found out later that we had a duplication in that respect and that is the main reason for the correction that was later made.

Q. All right. Now, on gas well construction did you report to the Railroad Commission of Texas that the annual depreciation reserve accrual should be \$139,651.67?

A. That is correct, and there is a large measure of duplication between those figures, in that we used the actual [fol. 3164] purchase price there, which included a large part of the gas well construction of the company.

Q. Did you report to the Railroad Commission of Texas that the allowance for depreciation in connection with gas

well equipment should be \$58,804.85?

A. That is what that figure shows there. In the hearing before the Railroad Commission we made the necessary corrections. Those also are on a straight line basis.

'Q. Yes, sir—they are on a straight line basis, but you did present those figures to the Railroad Commission of Texas?

A. Yes.

Q. Now, what is the sum total of the allowances for annual depreciation as set forth in the report that you made to the Railroad Commission of Texas covering leaseholds and mineral fee lands, gas well construction, and gas well equipment?

A. If you will read the figures, I will answer.

- Q. We will use round figures, Mr. Freese; ninety-seven thousand, one hundred thirty-nine thousand, and fifty-seven thousand.
  - A. There is \$293,000.00.

Q. \$293,000.00?

A. Yes, sir.

Q. Now, of course, a small portion of this was applicable to the State of Oklahoma, was it not?

A. Yes, and there is a large measure of duplication.

Q. Well, how much duplication is there?

[fol. 3165] A. I don't know what the exact amount is. It is somewhere in the neighborhood of seventy or eighty thousand.

Q. Well, now, what is the total figure that you have included for those three items—gas well construction and equipment and leaseholds?

A. \$293,000.00.

Q. Well, if we deduct seventy thousand dollars for duplications, what is the resulting figure?

A. \$223,000.00.

- Q. Now, how much of that would be applicable to the State of Oklahoma?
  - A. About 20 per cent.
  - Q. About 20 per cent.—what does that leave?

A. That leaves \$180,000.00.

Q. It leaves \$180,000. Now, that would be the depreciation and depletion requirements in connection with the Texas producing properties, would it not?

A. No, unless that were corrected that would not be the

orrect amount.

Q. All right. How would you correct it to get at the proper amount for annual reserve accruals covering depreciation and depletion on the Texas Production System Properties?

A. Well, in the hearing before the Railroad Commis-

sion--

Q. Now, I want to know what you would do about it.

A. Well, it is what I did do about it in the hearing before the Railroad Commission.

[fol. 3166] Q. You had changed your ideas materially

about that by that time, hadn't you, Mr. Freese?

A. No; I had found that we were using actual costs of the wells; that they were not leaseholds only, but that the company had included in the figure or there was included in that figure a great part of gas well construction. We found an annual amount after it was corrected on the 6 per cent. basis used by the Railroad Commission of \$97,064.00 and on other Production System Structures, \$1,044.35.

Q. By some coincidence the Railroad Commission hap-

pened to adopt your exact figure, did it not?

A. No.

Q. After making the adjustment from the 7 per cent. to

the 6 per cent. factor?

A. They used substantially the same figure after making that adjustment.

Q. That is, they used substantially your estimates?

A. The depletion allowance for the year 1931 was \$15,-631.45.

Q. All right. What would it be for the twelve months ended March 31, 1934?

A. \$18,500.00.

Q. All right. Now, what would be the depreciation and depletion which would be applicable to Production System Property according to your estimate and the estimate of the Railroad Commission?

A. \$116,000.00.

[fol. 3167] Q. For the Texas and Oklahoma property?

A. For the Texas and Oklahoma property.

Q. Well, now, how much of that would be attributable to Texas?

A. Approximately \$94,000.00.

Q. Now, you have allowed on the gas production by the company for the twelve months ending March 31, 1934, \$232,000.00 plus?

A. Yes.

Q. And your depletion and depreciation requirements would be approximately \$94,000.00, you say?

A. Yes.

Q. Now, will you deduct \$94,000.00 from your allowance for the value of the company's gas properties for the twelve months ended March 31, 1934?

A. That would amount to \$138,000.00.

Q. That would amount to \$138,000.00?

A. Yes.

Q. Now, that would be the net amount available to the company before Federal income tax for return on whatever value inheres in the Production System Property?

A. Yes.

Q. What would be the per cent. relation of \$134,000.00 to the adjusted book cost of the Production System Property as set forth by Mr. Phillips in Plaintiffs' Exhibit 4?

A. One hundred thirty-eight thousand divided by four

and a half million gives 3 per cent.

Q. It would be approximately 3 per cent? [fol. 3168] A. Yes.

Q. And that would be available for net return to the company upon the adjusted book cost of the Texas Production System Properties?

A. With the little amount of gas used, yes. Now, a fair

return on the actual value would not be that figure.

Q. Well, you have not testified as to actual values of the Production System Property?

A. No, I have not.

Q. Do you care to do so?

A. I will try to answer your questions as best I can.

Q. Now, refer to page one of Plaintiffs' Exhibit 8 so the jury will not misunderstand this exhibit, Mr. Freese, and so I will not misunderstand it, these figures of \$268,829.64 and \$441,240.12, covering temperature correction for the

two twelve month periods stated, are theoretical rather than

actual, aren't they?

A. Yes, if by "theoretical" you mean that they did not actually receive that money by reason of the fact that it was a very warm year. However, the computations are based upon the actual experience of the company in the use of degree days of deficiency based on the experience of the company in that year or in those two periods.

Q. It was not, however, based upon the actual tempera-

ture figures which prevail?

A. Yes, the computations were based on those.

Q. Well, the funds of the company have to conform to [fol. 3169] what you thought ought to be normal weather conditions?

A. Not what I thought they are, but what the normal weather conditions are.

Q. Well, what you determined the actual weather conditions to be?

A. Yes.

Q. Well, now, Mr. Freese, you are pretty good at figures. You have already corrected your depreciation allowance of eight hundred thirty-one thousand plus by adding some one hundred sixteen thousand dollars to it. What would have been the effect on your determined percentage of 6.74 if you had eliminated from your column of calculations for the twelve months ended March 31, 1934, the temperature correction which you made amounting to \$232,644.75?

A. You mean \$268,829.00?

Q. That is correct, Mr. Freese.

A. 6.16 per cent.

[fol. 3170] Q. Does that take into consideration the addition of \$16,500 additional for depreciation?

A. No; it does not:

Q. Well, make that correction.

A. 6.13 per cent—six and thirteen-hundredths per cent.

Q. Now, what would be true in connection with your calculations for the 12 months ended December 31, 1933, if you eliminated your temperature correction and adjusted your depreciation allowance to take care of your correction by the addition of \$16,500?

A. 5.77 per cent.

Q. 5.77 per cent?

A. Yes.

Q. Something less than 6 per cent, which the Railroad Commission of Texas, in its opinion and order established as the minimum net return which the Company was entitled to receive?

A. That is correct; but as the temperatures went back to normal, it very quickly went above the six per cent again.

- Q. Now, Mr. Freese, in order that there may be no possible confusion about what you have done, and what you have not done, I will ask you if the figure of \$40,256,862.39, appearing in the lower left-hand corner of page 1 of Plaintiffs' Exhibit 8, is taken from page 2 of Plaintiffs' Exhibit 6?
- A. That is correct.
- Q. The same figure is set forth on page 2 of Plaintiffs' [fol. 3171] Exhibit 6?
  - A. That is correct.
- Q. And it does not include any production system property?
  - A. That is correct.
- Q. And which production system property in Defendant's Exhibit 28 was determined to have a reproduction cost new value, including undistributed general costs in the amount of \$9,141,858.05?
- A. That is the figure which shows on page 1 of Exhibit 28, for production system property.
- Q. Of course, that figure includes production system property in both Texas and Oklahoma?
  - A. Yes.
- Q. And by far the major portion of the Company's production system property is located in the State of Texas, is it not, Mr. Freese?
  - A. Yes.

Q. What per cent would you say, approximately?

- A. I don't know that I could give that figure very accurately. The reserves are less than one per cent in Oklahoma.
  - Q. Of the gas reserves?
  - A. Yes.
- Q. The gas well equipment in Oklahoma would be substantially in excess of one per cent?
- A. Oh, yes; it would probably be 15 per cent or more—perhaps 20 per cent.

[fol. 3172] Q. But a ready segregation could be made by going through Defendant's Exhibit 28, could it not?

A. I don't know whether it could or not, because what actually takes place is that you go through Exhibit 28 and add up seven million dollars worth of that property, and when you get to Hulcy's exhibit you take the entire amount away.

Q. The item of gas well equipment could be identified by the list of the wells located in the several fields, could it

not?

A. Yes; but the company's method of evaluating the gas reserves was simply to apply to the well-head price the predicted future price of that gas and the predicted withdrawals, and to deduct from that capitalization the value of the gas well equipment as found in Exhibit 28; so it is purely a washout as far as Exhibit 28 is concerned.

Q. As far as gas well equipment and construction are concerned, isn't it true that the equipment is readily identified by a reference to Defendant's Exhibit 28 as between the Texas and Oklahoma gas fields? I would like to refresh

your memory.

A. I know exactly what is in there. There is listed by fields the gas equipment and it is all added up to a certain sum, and the whole thing is deducted from Mr. Hulcy's gas leaseholds, so there is not one penny that could be identified in the net result as being for any particular well or gas well equipment.

[fol. 3173] Q. Mr. Freese, I will ask you again, if you refer to Defendant's Exhibit 28 is gas well equipment

identified by fields?

A. That is true, as I testified. However, I said it was all put in and all taken out again.

Q. Where is the Chickasha gas field?

A. In Oklahoma.

Q. Where is the Fox Gas Field?

A. In Oklahoma.

Q. Where is the Duncan gas field?

A. In Oklahoma.

Q. Where is the Loco Gas Field?

A. West Texas.

Q. The Loco Gas Field is in West Texas?

A. No; I beg your pardon; in Oklahoma, on Line G.

Q. Where is the Panhandle Gas Field?

- A. In Texas.
- Q. And where is the West Texas field, as described in Defendant's Exhibit 28?
  - A. West Texas.
  - Q. And where is the Petrolia Field located?
  - A. In Texas.
- Q. Now, all of the gas well construction and equipment of the company is identified by separate fields in Defendant's Exhibit 28, is it not?

A. There is listed under separate fields the gas well equipment in Defendant's Exhibit 28.

[fol. 3174] OLIN CULBERTSON, recalled by the State, testified as follows:

Direct examination.

Questions by Mr. Stout:

- Q. You are the Chief of the Gas Utilities Division of the Railroad Commission?
  - A. Yes, sir.
- [fol. 3175] Q. Have you prepared any kind of list or chart showing the inter-corporate affiliation and relationship of the Directors and officers of the Lone Star Gas Company and the corporations affiliated with it in the production and transmission of natural gas?
  - A. Yes, sir.
  - Q. Do you have that chart with you?
  - A. I have.
  - Q. Let's see the original of it, please?

[fol. 3176] The Court: What is it you are doing, now? Mr. Stout: I am offering this same chart in evidence, but with the elimination of the Galveston Gas Service Comfol. 3177] pany, Northwest Texas Gas Company, and Stamford & Western Gas Company, and sundry directors and officers in those who are also officers and directors of the Lone Star Gas Corporation and Lone Star Gas Company. We offer the chart with those three eliminated.

[fol. 3178] The Court: The chart as amended, with these three companies stricken, will be admitted.

(Thereupon, the document above referred to was marked as Plaintiffs' Exhibit No. 9.)

Mr. Griffith: Where did you get this, Judge Culberson? Out of the newspaper?

A. No, out of probably some worthless records in the

Railroad Commission.

Mr. Stout: Made by the company we are dealing with?

A. Well, I will take that "worthless" statement back, in as much as the companies themselves made them.

Mr. Stout: Your Honor, I have got a red line drawn thru

those three companies.

The Court: The jury understands that this chart as submitted in evidence is not to be considered, in so far as it deals with the three companies mentioned—that is, Galveston Gas Shares Company, the Northwest Gas Service Company or the Stamford & Western Gas Company, but that they are excluded from the chart as now amended.

Mr. Griffith: Your Honor understood that our objection as to those three companies was by reason of the fact that those three companies neither buy gas from nor sell gas

to the Lone Star Gas Company?

The Court: Yes, and I sustained the objection as to [fol. 3179] those three companies and they have now amended the chart and I have admitted the chart as amended.

Mr. Griffith: Is this Plaintiffs' Exhibit No. 9, Mr. Re-

porter. (Told that it is.)

The Witness: If the Court and counsel want it, I can make up an exhibit eliminating those three entirely, but I was told at noon to put all of them in.

### Mr. Stout:

Q. I will ask you, Judge Culberson, if George B. Crawford, T. B. Gregory, David E. Mitchell, and G. M. Simpson, all residing at Pittsburgh, Pennsylvania; and R. A. Crawford, L. B. Denning and Karl F. Griffith, all residing at Dallas, Texas, with offices at 1915 Wood Street, or offices at that address, are not the directors of the Lone Star Gas Corporation?

A. Yes; that was the testimony, as I recall it, of Mr. Griffith and the information that we have here on the report

of the relation of holding companies to operating companies in power and gas, affecting control, by the Interstate Commerce investigating committee, submitted by Mr. Rayburn under authority of Joint Resolution 572 of the 72nd Con-

gress.

Q. Are the officers in the main of the Lone Star Gas Corporation, Mr. George W. Crawford, president—or rather, chairman of the board of directors; Mr. L. B. Denning, President, and the vice-presidents being T. B. Gregory, R. A. Crawford, J. M. Simpson and Karl F. Griffith; D. L. Cobb is secretary and treasurer and David E. Mitchell is assistant secretary?

[fol. 3180] A. Yes.

Q. Are you familiar with and have you read over this? (Indicating bound volume.)

A. Yes, that testimony given heretofore.

Q. Is Mr. Karl F. Griffith the general counsel for Lone Star Gas Company?

A. Yes, and the report so shows it and I think he admits it.

- 'Q. And for the distributing companies within the State of Texas?
  - A. Yes.
  - Q. And the Lone Star Gas Corporation?

A. Yes:

Q. Explain to the jury, Mr. Culberson, please sir, just what this chart is and the general nature of it.

A. It is a compilation of those gentlemen who are directors and officers in the respective companies shown there at the head of the chart—the Lone Star Gas Corporation and the underlying companies. For instance, Mr. Frank L.

and the underlying companies. For instance, Mr. Frank L. Chase, in the second column it shows Community Natural Gas Company; D is Director; P is President, and GM is General Manager. There is a legend at the bottom which indicates the respective offices held by these respective gentlemen.

Q. D, of course, means Director?

A. Yes. P is president, VP means vice president, S means secretary, T means treasurer, GM means it is General Manager, and GC is general Counsel, and Ch. Engr. is Chief Engineer. Where there are one or more such designations, as in the case of D. L. Cobb under the heading of Municipal Gas Company, it shows D, which means he is [fol. 3181] a director, and VP which means he is also vice

president, and T, that he is also treasurer of that same company; and Mr. Cobb is secretary and treasurer of the Texas Cities Gas Company.

Q. You of course held hearings, where distributing companies were present and gave testimony, have you not?

A. Yes.

Q. In those hearings the same sort of service and the same sort of charges, or the same sort of purported service and the same kind of charges, were made by the parent company in those cases, as were made in this case by the Lone Star Gas Company, were they not?

A. Yes.

[fol. 3182] Q. I believe Mr. Griffith was present at those hearings, was he not, and acted as leading counsel for the company?

A. Yes.

Q. Do you have any other explanation, Judge Culberson, that you desire to make in connection with this chart?

A. No sir, none further than that at the bottom there are indicated the number of directors and company totals that indicates the membership, or directorate—that is, the participation in the directorate, such as number 7, under the Lone Star Gas Corporation—that is seven of those individuals were members of the directorate. For Community Natural Gas Company, there were five.

[fol. 3183] Q. How many times does the name of L. B. Denning, president of Lone Star Gas Corporation, and residing at 1915 Wood Street, Dallas, show across long-ways

in this chart?

A. Five times.

Q. Five? Isn't it about seven? L. B. Denning is about fifth or sixth from the top.

A. I have it. Not if you have stricken those three com-

panies; it would be five times.

Q. That's right. That is my mistake. How many times does the name of R. A. Crawford, who is a director and vice president, or at least an office- in the Lone Star Gas Corporation, appear across this page?

A. Three times.

Q. R. A. Crawford?

A. Yes.

The Court: I think you had better count them again.

Q. He is the fifth from the top.

A. He shows to be a director and vice president of the Lone Star Gas Corporation; is a director of the County Gas Company, and that's one; Dallas Gas Company, is two; and he is director, vice president and general manager of the Lone Star Gas Company, and that is three, and the other three are stricken.

Q. The third member and director of the Lone Star Gas Corporation, Mr. Karl F. Griffith, general counsel for all companies. How many times does his name appear as an [fol. 3184] officer of one of these companies, or a director?

A. Four times.

Q. And that is not counting the stricken times?

A. That is right.

[fol. 3185] Mr. Stout: We now offer in evidence the charter of the Lone Star Gas Company—the original charter, in 1909.

[fol. 3186] (Thereupon the document above referred to was marked as Plaintiffs' Exhibit No. 10.)

[fols. 3187-3194] The Court: I sustain the motion to strike from this exhibit all reference to how the capital was paid.

[fol. 3195] Plaintiffs rest.

[fol. 3196] The Court: What says the defendant?

Mr. Griffith: We will call in rebuttal Mr. E. A. Steinberger.

E. A. Steinberger, recalled by defendant, testified further as follows:

#### Direct examination.

## Questions by Mr. Griffith:

Q. You are the same E. A. Steinberger who has heretofore appeared and testified in this case?

A. I am.

Q. Mr. Steinberger, in connection with the Defendant's Exhibit 28, what was the weighted cost of machine excavation which was used.

A. The weighted cost of machine excavation that was used in the preparation of Exhibit 28 was 48.31 cents per cubic yard.

Q. That was for machine excavation alone, was it?

A. That is correct.

Q. Did that include any hand excavation along with the machine?

A. It did not.

Q. Mr. Steinberger, have you made analysis of the actual performance of trenching machines in connection with the excavation of trenches for the construction of a great number of miles of the Lone Star Gas Company's pipe line [fol. 3197] system?

A. I made such an analysis—in other words, I made an analysis of the actual cost per cubic yard for machine excavation on approximately 2,380,262 lineal feet of trench.

Q. How much would that be in miles, Mr. Steinberger?

A. Approximately 452 miles.

Q. In other words, you had actual performance records available covering the company's construction of 452 miles

of pipe line system?

A. I have, Mr. Griffith. By "performance record" I mean that the study that I have made is based upon the actual experience and based upon the so-called daily progress reports and which reports I have testified to rather at length in connection with my qualifications. Those reports contained the detailed personnel that was required each day to perform a certain amount of work—that is, to excavate certain lineal feet of trench. Those reports also show in detail the exact trench width as well as depth for every five hundred feet. Those are necessary in order to compute the cubic yardage of excavation, not only for each day but for the job as a whole.

Q. Mr. Steinberger, will you refer to pages 21 to 23,

inclusive, of Plaintiff's Exhibit 6. What cost per cubic yard of excavation did Mr. Freese adopt covering trench [fol. 3198] excavation in connection with Transmission Line Equipment?

A. Mr. Freese adopted a unit cost of 37½ cents per cubic yard for machine excavation. This cost, however, includes hand excavation in connection with the machine excavation; in other words, on short stretches, which are inaccessible for a ditching machine, such as embankments, creek beds, and other rough places which a ditching machine could not dig and which trench it was necessary to dig by hand.

Q. In other words, that is the hand excavation which is done by hand excavation gang which accompanies the ditching machine?

A. That is correct. Sometimes they are with the ditching machine and sometimes two or three miles ahead of it.

[fol. 3199] Q. Now, Mr. Steinberger, what was the company's actual experience in the matter of machine excavation covering 452 miles of pipe line system as far as the cost per cubic yard is concerned?

A. The actual cost to the company on the excavation of

452 miles of ditch was 46.46 cents.

Q. Per cubic yard?

A. Per cubic yard, yes, sir.

Q. Now, what labor rate was that based upon, Mr. Steinberger?

A. It was based upon common labor rate of 35 cents per hour for laborers, 60 cents per hour for foremen, 45 cents for truck drivers, 35 cents for night watchmen.

Q. Now, based upon the company's actual experience in connection with the hand excavation along with the machine—what was the cost to the company of the hand excavation and covering how many yeards?

A. The actual cost to the company for hand excavation in connection with ditching machine work was \$2.08 per cubic yard and covered a total of 10,692.7 cubic yards.

Q. Now, that was the cost for hand excavation along with the progress of the machine excavation?

A. That is correct.

Q. And not the cost for hand excavation on long stretches where the ditch would be excavated by hand excavation?

[fol. 3200] A. That is correct. It does not include the cost of hand excavation where there was no ditching machine used.

Q. Mr. Steinberger, has the company had a good deal of experience in connection with rock excavation and covering which experience you have made an analysis of the company's costs?

A. In connection with, or, rather, in conjunction with the excavation of 452 miles of trenches which I made a study of, the company had considerable experience with rock excavation to the extent of 28,748.1 cubic yards.

[fol. 3201] Q. Now, what was the actual cost to the Company of that rock excavation?

A. The actual cost to the Company of the rock excavation was \$3.23 for labor and equipment; \$.6047 for blasting material; or a total of \$3.8363 per cubic yard.

Q. How does that compare with the cost of rock excava-

tion used in Defendant's Exhibit 28?

A. The cost per cubic yard for rock excavation used in the preparation of Defendant's Exhibit 28 is \$3.897 per cubic yard for Texas, and \$3.826 per cubic yard for Oklahoma.

Q. In other words, the cost used for Oklahoma was slightly below the Company's actual experience, and the cost used for Texas was slightly above the Company's actual experience?

A. That is correct; it is due to difference in workmens'

compensation insurance and public liability rates.

Q. Refer please to pages 21 to 23, inclusive, of Plaintiff's Exhibit 6. What cost for rock excavation did Mr. Freese use and adopt in connection with Transmission Line Equipment?

A. Referring to pages 21, 22, and 23 of Plaintiffs' Exhibit 6, it will be noted that Mr. Freese used a cost of \$3.50

per cubic yard for rock excavation.

Q. And that is approximately 33 cents per cubic yard below the Company's actual experience on approximately 28,000 cubic yards of rock excavation?

A. That is correct; 33.6 cents per cubic yards.

[fol. 3202] Q. And a quantity of approximately 28,000 cubic yards, is that correct?

- A. Based on the actual study of 28,000 cubic yards, yes, sir.
- Q. Mr. Steinberger, have you prepared a compilation showing a comparison of Mr. Freese's adopted excavation costs with the book or actual costs on the several pipe line systems evaluated by Mr. Freese and set forth at pages 21 to 23 of Plaintiff's Exhibit 6?
  - A. I have prepared such an exhibit, yes, sir.

Q. Will you produce it, please?

A. Yes, sir.

Q. Does the compilation also show a comparison between Mr. Freese's adopted costs for the several pipe line systems, as set forth in Plaintiffs' Exhibit 6, and the actual costs to the Company of this Transmission System property?

A. It does.

Mr. Griffith: We offer the compilation so identified by the witness in evidence.

(Thereupon the compilation above referred to was marked for identification as Defendant's Exhibit No. 47.)

# [fol. 3203] Examination by Mr. Fitzhugh:

Q. On the first page of your exhibit, Mr. Steinberger, you have a column "Book Cost"?

Å. Yes, sir.

Q. And in the last column you have a per cent of Plaintiffs' Exhibit 6 Less than Book Cost?

A. Yes, sir.

Q. And amounts in that same column?

A. Yes, sir.

Q. Now, if I get the idea of this page, you are trying to compare the amounts for excavation on these lines as used in Plaintiffs' Exhibit 6 and the Actual Cost of Excavation on these lines; is that it?

A. That is correct.

Q. Now, when was 2nd B built?

A. 2nd B was built—I will give you the exact date—(Refers to data) According to the daily progress reports which I have before me, Line 2nd B was constructed between July 23 and October 8, 1929.

Q. When was K-B 16-inch built?

A. K-B 16-inch was built approximately a month prior to the construction of Line 2nd B, because they moved on down from Line KB 16-inch to Line 2nd B.

Q. To sum up, every line you have listed here was built

prior to 1929, was it not?

[fol. 3204] A. No, sir; they were not built prior to 1929. They were built either in the latter part of 1929 or the early part of 1930, at the prevailing common labor rate of thirty-five cents per hour.

Q. Now, on the second page of your Exhibit you show a

Book Cost by different systems?

A. By different systems, yes.

Q. These systems, were some of them the original lines?

A. That is correct.

Q. And these book costs are from 1929 down to the present time?

A. That is correct.

## Direct examination resumed.

# Questions by Mr. Griffith:

Q. Mr. Steinberger, refer to the first page in Defendant's Exhibit 47.

A. All right.

Q. What do you show on that page?

A. The first page of Defendant's Exhibit 47 shows a comparison of excavation cost between the cost used in [fol. 3205] Defendant's Exhibit 28, Plaintiffs' Exhibit 6, and the Actual or Historical Book Costs.

Q. And that is true in connection with six specific lines

of the Company, is it not?

A. That is correct.

Q. And why did you use these six specific lines rather

than some other lines?

A. Those lines were built in 1929 and '30, during which time I had daily progress reports of construction. In other words, I was able to determine from the overall costs of the line, the exact cost of ditch machine excavation, as segregated from backfill costs, or laying or stringing costs. In the case of lines built prior to 1929, the records of the Company do not give a complete segregation of the classification of the work.

Q. That is as between excavation, and back filling, and

laying and stringing, and testing, and so forth?

A. That is correct. I have used these lines because they were major lines constructed during that period. While I made a study of approximately four hundred miles of trench excavation, some of those lines were in Oklahoma, which I eliminated in this exhibit; other lines were extensions of lines previously laid, and I was not able to get the exact yardage as used in Plaintiffs' Exhibit 6. The yardage so shown in the third column, in Cubic Yards, was [fol. 3206] ascertained from both Plaintiffs' Exhibit 6, as well as Defendant's Exhibit 28, and from the original progress reports.

Q. Now, the lines which you have set out on the first page in Plaintiffs' Exhibit 47 account for 290.6 miles of

pipe line excavation, do they not?

A. They do, yes, sir.

Q. And account for a cubic yardage of excavation of 310,897.7 cubic yards?

A. Yes, sir.

Q. Now, what is the excavation cost as used in Defendant's Exhibit 28 covering these six lines?

A. The excavation cost as reflected in Defendant's Exhibit 28 for the six lines as set forth in Defendant's Exhibit 47, first page of that exhibit, the total is \$226,569.66.

Q. Now, that covers all classes of excavation, does it not?

A. It does; it covers all sizes of trenches—trenches for 3-inch outside diameter pipe, up to 20 inches outside diameter pipe.

Q. Now, what are the corresponding costs of excavation for these six lines, as shown by Plaintiffs' Exhibit 6, and as adopted by Mr. Freese in his evaluation?

A. \$184,289.43.

Q. Now, what was the actual cost to the Company of the

excavation work on these six lines?

A. The actual book cost or historical cost, or out-ofpocket expense to the Company for the excavation of these six lines is \$289,849.15.

[fol. 3207] Q. Now, what do you show in the next two

columns on that page?

A. The next two columns on that page show the difference between the book cost and the cost as set forth in Plaintiffs' Exhibit 6. In other words, on Line Second B

the book cost as \$156,650.41; Plaintiffs' Exhibit 6 makes an allowance for the same class of work for the same line of \$110,423.08, and which figure is \$46,227.33 below the book cost, and which figure is  $29\frac{1}{2}$  per cent.

Q. Below the book cost?

A. Below the book cost.

Q. And correspondingly, for Line KB 16-inch, Line K-5, Line K-5-1, Line O-29, and Line L-26, do you show the amount by which Mr. Freese in his Exhibit 6 was below the actual cash cost to the Company on this excavation work?

A. I do. By referring to the first page of Defendant's Exhibit 47 it will be noted, as previously testified, that the total book cost of excavation for the six lines was \$289,849.15; whereas, in Plaintiffs' Exhibit 6 the same cost was evaluated at \$184,289.43, or \$105,559.92 less than the actual book cost, and which difference is 36.4 per cent less than [fol. 3208] the book cost; in other words, Plaintiffs' Exhibit 6 is 36.4 per cent below the book cost.

Q. Now, during 1929 and 1930 what labor rates was the

Company paying on this excavation work?

A. By referring to my progress reports, which reports were prepared during actual construction,—the Company paid from 35 to 40 cents per hour for common laborers,—skilled laborers 40 cents per hour, unskilled laborers 35 cents per hour.

Q. What rate for common labor is the Company paying

today, Mr. Steinberger?

A. 40 cents per hour.

Q. And is it paying that throughout its pipe line work?

A. It is. I have before me a signed statement, sworn to before a Notary Public, and signed by our Paymaster, that the Company is now paying 40 cents for common labor throughout the entire System.

Q. And do you know that of your own knowledge, aside

from that statement you have referred to?

A. I do.

Q. Refer, please, to the second page of Defendant's Exhibit 47.

A. Yes, sir.

Q. Do you show on that page a comparison between Mr. Freese's adopted evaluation cost for the several pipe line [fol. 3209] systems as set forth in Plaintiffs' Exhibit 6, and the actual cash cost to the Company of that Transmission System Property?

A. I do.

Q. What does Mr. Freese show as the total evaluated cost of the several pipe line system which he evaluated in connection with his Exhibit 6?

A. Mr. Freese shows a total cost of \$28,659,795.67. That covers identically the same properties that were evaluated by Mr. Freese in connection with his Exhibit 6, namely, Texas properties, excluding, of course, such lines as Line G and both Lines H and Second H.

Q. Those lines running from-

A. Line G running from Gainesville to Red River, a distance of a little in excess of 20 miles, and Line H and Second H running from Petrolia to the Red River, a distance of approximately eleven miles.

Q. Now, Mr. Steinberger, several witnesses have stated several distance- as covering the pipe line mileage between Line G and Gainesville. Are you satisfied that twenty

miles is approximately correct?

A. Yes, sir. The exact mileage, Mr. Griffith, is—from the Junction—that is, from the G. & E. Junction to the Gainesville gasoline plant—3.74; from the gasoline plant [fol. 3210] to the Red River, 16.31 miles; or a total of—rather, 16.3 miles; or a total of 19.6 miles.

Q. And Mr. Freese, in compiling Plaintiffs' Exhibit 6, therefore eliminated from the Texas property a total of 19 miles of 16-inch pipe on Line G?

A. That is correct. Similarly, of course, on Lines H

and Second H.

- Q. Now, what do the books of the Company actually reflect, Mr. Steinberger, as far as the actual cash cost to the Company of the several pipe line systems which Mr. Freese evaluated in Plaintiffs' Exhibit 6?
- A. As shown on the second sheet of Defendant's Exhibit 47, the actual book cost of the Transmission System Property in the State of Texas; that is, as adopted by Mr. Freese as being in the State of Texas, as set forth in his Exhibit 6 for a total of \$31,353,035.54.
- Q. Now, was Mr. Freese above or below the book cost over-all?
- A. Mr. Freese was below the book cost to the amount of \$2,693,239.87.

Q. On Line K, for example, was Mr. Freese below the actual—in his evaluated figure for the K System, below the book cost in the amount of \$1,033,451.62?

A. That is correct.

[fol. 3211] Q. Expressed as a percentage, Mr. Steinberger, what was Mr. Freese below the actual cash cost to the Company, as reflected by its books, and as set forth in his Exhibit 6?

A. That is practically 20 per cent.

Q. Mr. Steinberger, aren't you mistaken? Isn't it less than 10 per cent?

A. It is 16.5 per cent on the K System.

Q. Oh, on the K System, you are referring to?

A. K, yes, sir.

Q. I was referring to the over-all figure, Mr. Steinberger.

A. Pardon me.

Q. Where there was a difference of \$2,693,239.87.

A. Mr. Freese has 8.7 per cent below the actual book cost.

Q. Now, where you use the term, Mr. Steinberger, "actual book cost" in connection with Defendant's Exhibit 47, do you refer to the actual cash cost to the Company of the work done, or the property, as the case may be?

A. That is correct. That figure of \$31,353,035.54 is the actual cash cost to the Company. It does not include any

revaluation.

Q. Mr. Steinberger, Lone Star Gas Company was built up gradually, was it not, from 1909 up to the present time?

A. That is correct.

Q. Was the business of the Company attached overnight?

[fol. 3212] A. No, it was not.

Q. Have you made a study of the historical rate of attachment of business in a number of the smaller towns and cities which are served at wholesale by the pipe line system of the Company?

A. Yes, Mr. Griffith, I have made such a study of distribution systems attached to the pipe line system of the Lone Star Gas Company since 1927.

[fol. 3213] Q. Do you have that data here, and can you give us the historical rate of attachment of business in some 118 smaller towns and cities?

- A. I have this data here, and I would be glad to read it into the record. The study which I made covers 118 distribution plants ranging in size from as small as fifty meters per plant to as high as five hundred meters per plant.
- Q. When you refer to meters, you refer to the number of domestic customers, do you not?
- A. That is correct. That study disclosed that for the 118 natural gas distribution plants which I studied, during the first year there was a total of 69.21 per cent of the ultimate consumers attached; that during the second year for the same 118 plants, they had 89.29 per cent of the total ultimate consumers attached. Or, I can give the same figure on a consumer basis, probably. The total ultimate consumers on the 118 distribution plants amounted to 389,810 monthly billings. Of that the first year there were attached to the plant 269,789 which is 69.21 per cent of the ultimate. During the second year the total monthly billings made by the distribution plants were 348,047, which figure is 89.29 per cent of the ultimate. During the third year, there were made 377,462 monthly billings, which figure is 96.83 per cent of the ultimate. During the fourth year there were made 385,177 monthly billings, which figure is 98.81 per cent of the total. Now, with reference to the consumption. [fol. 3214] All the consumers did not avail themselves of the use of gas 100 per cent.
  - Q. You mean at the inception of natural gas service?
- A. That is correct. The ultimate consumption in M. C. F., or rather in thousand cubic feet on the 118 natural gas distribution plants studied, was 2,245,659 M. C. F. Of that, the first year there was a consumption of 1,370,837 MCF and which figure is 61.04 per cent of the ultimate consumption. The second year, the consumption was 1,983,398 M. C. F., and which figure is 88.32 per cent of the ultimate consumption. The third year, the consumption was 2,190,209 M. C. F., which figure is 97.53 per cent of the ultimate consumption, and the fourth year being considered as the saturated period.
- Q. In other words, the fourth year was considered as 100 per cent?
  - A. That is correct.

[fol. 3215] Q. Now, you said you weighted the percentages as between customer attachment and customer use?

A. That is correct. During the first year there were attached 69.21 per cent of the ultimate consumers and the consumption was 61.04 per cent of the ultimate, which gave me a weighted percentage of saturation of 42.25 per cent for the first year. For the second year there were a total of 89.29 per cent of the ultimate consumers attached, using 88.32 per cent of the ultimate consumption and giving a per cent of saturation of 78.86 per cent. During the third year there were attached 96.83 per cent of the ultimate consumers using 97.53 per cent of the ultimate consumption, giving a weighted per cent of saturation of 94.44 per cent. During the fourth year we had 98.81 per cent of the ultimate consumers using 100 per cent of total consumption giving 98.81 per cent weighted saturation, resulting in weighted per cent of idle plant, or unused portion of the [fol. 3216] plant for the first year, of 57.75 per cent; for the second year, of 21.14 per cent and for the third year 5.56 per cent, and the fourth year 1.2 per cent. [fols. 3217-3218] Q. As a result of your study, Mr. Stein-

[fols. 3217-3218] Q. As a result of your study, Mr. Steinberger, is it shown that it does take time to develop the business of the Lone Star Gas Company in regard to the wholesale sales of natural gas at the city gates of the several towns

and cities?

A. I believe the study I made and testified to fully sets fourth that conclusion.

[fol. 3219] Cross-examination.

## Questions by Mr. Fitzhugh:

Q. Mr. Steinberger, about what year was it when you came to the United States?

A. 1913.

Q. How long was it after you arrived in this country that you went to school in Arkansas?

A. About six months after I came here.

[fol. 3220] Q. What was the name of that institution?

A. Subiaco College, S-u-b-i-a-c-o; it's a school about fifty miles west—east of Fort Smith. I took an academic course there, and washed dishes and helped in the kitchen to get by.

Q. How long did you stay there?

A. Three years.

Q. Did you get a degree?

A. I did not.

Q. And you took an academic course, you say?

A. A three years course, but I didn't have any more clothes to wear and I couldn't finish the fourth year, and I was down to where I had to go to work.

Q. Did you have any engineering work while you were

there?

A. I did not. After I left school—in fact, after I entered the railroad service in Galveston and while I was employed in the office of the Chief Statistician for the Southwest Regional District I took an Accounting Course at LaSalle University, which is a two-year course, and I completed it in eleven months, and a deploma was awarded to me; and after that I took a Business Administration Course in LaSalle University; that is a four-year course, which I completed in 8 months, and I was also awarded a deploma. [fol. 3221] Q. Those are correspondence school courses, are they not?

A. That is correct. I happened to be too poor a boy to

go to a university-

Q. I am not trying to inquire into your financial status, Mr. Steinberger; I just want to know what education you have had. Have you ever had any engineering at all?

A. No, sir, except I took about one-third of a civil engineering course at the I.C.S.—that is the National Correspondence School; but the work was getting so voluminous with the Lone Star Gas Company that I couldn't pursue that course further.

Q. Now, after you left the school in Arkansas you came down to Texas and went to work for the railroad, did you not?

A. For about six or eight months after I left school I worked on the wheat fields in Kansas and worked on the section as a section laborer in the western part of Oklahoma and the northern part of Texas, and then I secured a job as station helper and night telegraph operator in North Texas.

Q. And from those jobs you gradually worked up to a bookkeeping position, did you not?

A. That is correct.

[fol. 3222] Q. Now, about what date was it when you were working for the Union Terminal up in Dallas?

A. I worked for the Union Terminal from April 6, 1921,

until April 1, 1926.

Q. And I believe you stated that while you were working there, Sanderson & Porter, engineers of New York, started making the appraisal for the Lone Star Gas Company?

A. No, sir, when I worked with the Union Terminal Company at Dallas I worked with engineers who were employed by the Union Terminal Company to effect a settlement between the corporate owners of the Union Terminal Company and the United States Railroad Administration, with reference to payment to the corporate owners for deferred maintenance that was incurred to the Union Terminal Company during the period of Federal control.

Q. All right, sir. Then how did you get employed by

Sanderson & Porter?

A. I never worked for Sanderson & Porter.

Q. Did you work for the Lone Star at the time Sanderson

& Porter were making their appraisal?

A. That is correct. I was representative for the Lone Star Gas Company's representatives when Sanderson & Porter did the work for the Lone Star.

[fol. 3223] Q. I see. Now, up to that time you had never

done any engineering work of any sort, had you?

A. No, sir, except with the engineers of the Union Terminal Company in the compilation of the depreciation and life expectancy of the facilities of the Terminal.

Q. What is the date you come to the Lone Star?

A. I entered the employment of the Lone Star Gas

Company on June 15, 1926.

Q. Now, isn't it a fact, Mr. Steinberger, as has been testified to previously by you in the hearing before the Railroad Commission, that you have never built so much as one foot of gas pipe line?

A. That is correct; I haven't built a foot of gas pipe

line.

Q. And you have never supervised any excavation work, have you?

A. That is correct.

Q. And you have never designed any sort of gas transmission equipment, compressing station equipment, or anything else of that nature, have you?

A. That is correct; but may I make a statement, Mr.

Fitzhugh?

Q. Yes, sir.

A. While I have never designed, constructed, or super-[fol. 3224] vised the construction of a single foot of natural gas pipe line, I have gathered data as to unit costs of construction that are probably more voluminous and more thorough than any data compiled by any one. Those data were compiled by myself or under my supervision on the ground, while the work was in progress.

Q. Granting for the moment that all of that is true, Mr. Steinberger,—all of that work is properly the work of a

cost accountant, is it not?

A. No, all of that work is not properly the work of a cost accountant sitting in an office compiling the figures. He has to be on the ground to do that work.

Q. You haven't the temerity, have you, to assert that that

is engineering work?

A. In a sense it is.

- Q. In a sense it is?
- A. That is correct.
- Q. In what sense?
- A. As a cost accountant you have to have a knowledge of what enters into a pipe line construction job. If you have never been on the ground and seen the construction of a pipe line, you couldn't compile the cost data as I have done here.
- Q. Mr. Steinberger, if you have sheets coming in from [fol. 3225] day to day, that tell the number of men working on a particular job, the performance that they are able to get in doing that work, and the cost of doing the work, isn't the analysis of that sort of date purely the work of a cost accountant and not of an engineer?

A. Data of that kind would be merely the data of a cost accountant, that is correct, if you have no knowledge of the system; but I do have a thorough knowledge of the Lone Star Gas Company, in addition to the cost data that I have

prepared.

Q. Now, in testifying originally, you told the jury you were a Valuation Engineer for the Lone Star Gas Company, did you not?

A. That is correct; and I so consider myself.

Q. You don't mean to say that the word Engineer is

synonymous with Civil Engineer, do you?

A. Indeed, I consider myself an engineer in the natural gas industry. There is no School of Engineering at which

such training can be had; such knowledge can only be gained

by actual experience on the ground.

Q. Now, in this exhibit which you have introduced, you say you have studied several lines. As shown on the first sheet, the lines included in the study are: Second B, KB 16-inch, K-5, K-5-1, 0-29, and L-26.

[fol. 3226] A. That is correct.

Q. Now, all the data on those lines that you had for the purpose of your stucy, you say were gained from actual

construction records?

A. That is correct—from the Daily Progress Reports which were filed each day by the men in charge on the ground; for instance, by the time-keeper, who was responsible for the time; by the engineer, who was responsible for the performance.

Q. Now, explain to the jury, Mr. Steinberger, just how

vou got these actual cost records?

A. Well, we can take any job—the first one, here we have Line K-5, 6-inch, which is a line running from north of Granbury-to be exact, the line running due north of Granbury, connecting with Line K coming from West Texas, going south as far as Valley Mills; Line K-5-1 branches off south of Walnut Springs, going southwest to Hamlin. On the construction of that particular line we had-we used [fol. 3227] these Daily Progress Reports. Those reports are segregated into two sections; one is called the first section, or the firing line section, and the second is called the second or laying section. On the firing line or first section is shown the time—so-called the general time by the general foreman who has supervision of the entire job, and the assistant foreman, and the time-keeper, who takes care of the time for the front line gang, which is the firing line. And the trucks and cars assigned to general operation and general supervision of that particular job. The next is for cutting-for cutting and removing brush and timber, cutting the right of way, and building the fences and building temporary gates for this particular job. That work was done several weeks prior to the beginning of the laying of the line. The same is true with stringing of pipe. Those reports in that case were furnished me separately from the Stores Department, which Department is in charge of

stringing the pipe-that is, unloading the pipe from the railroad cars and hauling it along the right of way. And then comes the lining up. Lining up is welding the pipe end to end and tack welding. That time goes, for instance, to a foreman or a number of foreman. On that particular [fol. 3228] job we had two foreman, at 40 cents per hour, or \$8.00 per day; 17 laborers at 35 cents per hour, 170 hours, or \$59.50 per day; a truck driver at 40 cents per hour, 11 hours, \$4.40; one truck, 11 hours, \$8.40; and a blacksmith at 50 cents per hour for ten hours, would be \$5.00. Then comes the welding; for the welding we had a foreman-that is one foreman, \$210.00 per month, or \$6.77 per day; line welders, \$1.00 per hour, worked 125 hours, total cost \$125.00; generator men, three, at 40 cents per hour, working 25 hours, at \$10.00-a total per day of \$10.00; four laborers at 35 cents per hour, working 43 hours, or a total of \$15.05; one truck driver, \$125.00 per month, or \$4.03 per day. One truck, 10 hours, at a dollar per hour, or \$10.00 per day; five teams with drivers, at 70 cents per hours, 50 hours a day, or a total of \$35.00; and a night watchman at 35 cents per hour, 13 hours, or a total of \$4.55. Now, that crew used 15 drums of oxygen, 1,000 pounds of carbide, and 225 pounds of welding rods. During that day, on this particular day it is noted on the sheet that they lost two hours-the entire crew lost two hours, on account of detouring; but the Company had to pay the time regardless of whether the men were doing any welding or not; they [fol. 3229] made 160 six-inch welds that day; previous to that they had made-or, rather, that makes a total of 2658 welds. For that day next comes the testing of the linethat is, testing the various sections laid on top of the ground, and as you will recall Mr. Biddison's testimony, there are generally six or seven sections welded together on the side of the ditch, and then they are bull-pluggedor one end is bull-plugged and the other end is put on the compressor and pumped up to the required test of 250 to 300 pounds. For that we had: 1 foreman at \$4.00 per day; one laborer, \$3.50; one air compressor mounted on a truck, working five hours at a dollar per hour, or \$5.00 for that That crew tested 182 joints which were welded for that particular day. Next came the painting of the pipe on the side of the ditch. We had one paint foreman, at \$125.00 per month, or \$4.03 per day; five laborers at 35

cents per hour, or \$17.50 per day; one team, with driver, at 70 cents per hour, or \$7.00 per day.

Q. Now, wait just a minute before you leave that.

A. All right.

Q. Now, just to sum this up, Mr. Steinberger,—at the top of your sheet you have: "Daily Progress Report on Construction of Line...". In this particular case it is [fol. 3230] filled in with "K-5, six-inch, near Granbury".

A. That is correct.

Q. The date on this particular date line is 8/8/29?

A. That is correct.

- Q. Then ER, that stands for expenditure requisition.
- A. That is correct. Each job is assigned a separate number.
- Q. In this case it is 6945. And then you have a place for the weather.

A. That is correct.

Q. Showing whether it is fair or stormy or rainy?

A. That is right.

Q. Then, going down the sheet, you have all the time and expenses divided up in the divisions you have just explained to the jury?

A. That is correct.

Q. And you have, in the case of welding, places where the materials are used, the amounts of material, and any notations as to loss of time, and that sort of thing?

A. That is correct.

Q. Now, you have got that same sort of sheet on all those lines, haven't you?

A. That is correct.

Q. Who filled out this sheet?

[fol. 3231] A. Those sheets were filled out by the time-keeper for the engineer on the job, and signed by the foreman.

- Q. And then those sheets were sent in by the foreman to you at your Dallas office, and you compiled the information that you have given in these Progress Reports, is that it?
- A. That is correct; but you understand, Mr. Fitzhugh, that those Progress Reports were designed by myself.
- Q. Don't put that book up for just a minute. I want you to show the jury some more information.

A. Pardon me.

Q. Now, on the building of lines, the actual construction you usually have a rear end gang and a front end gang, do you not?

A. That is right.

Q. What do you mean by those designations?

A. The front end gang, as I testified before, constitutes the lining up, the welding, the testing, and the painting gangs; they are sometimes two or three miles ahead of the rear end gang, which consists of the gang clearing the right of way for the ditching machine, the hand ditching and machine gang—the ditching and machine gang, the laying gang, the backfilling gang, and finally the clean-up gang, [fol. 3232] which rebuilds the fences and takes down the temporary gates, and refixes the fences permanently.

Q. Now, the line you were just talking about was K-5,

was it not?

A. K-5, six-inch, yes.

Q. Is that one of the lines in your study in this exhibit?

A. Yes, sir.

Q. Now, will you take your equipment requisition sheets or your Daily Progress Reports on Line K-5 back up to the jury rail here—will you do that, Mr. Steinberger?

A. Yes, sir.

Q. Now, before the Railroad Commission, in making the same sort of examination, we asked you to pick out at random any of the sheets on Line K-5, and I believe you referred to August 27th, because we have got the record on that same sheet. I will ask you to look at that one—that is sheet one, from stake 332-plus-00—is that right?

A. Pardon me, Mr. Fitzhugh, what performance are you

speaking about?

Q. Well, what do you show for August 27th on Line K-5

in your Daily Progress Report?

A. I have here the front end gang. Will you give me those stake numbers again? I may be able to identify that. Is this the ditching gang?

[fol. 3233] Q. Yes, this is the ditching gang?
A. August 27th.

Q. Correct.

A. What is the stake number?

(Counsel hands data to witness.)

A. That is October 24th, 532-

'Q. Well, I don't suppose it makes any difference; just

take any of your sheets there. This line has considerable rock on it, does it not?

A. Yes, there is considerable rock between Granbury and

Walnut Springs.

[fol. 3234] Q. Well, take out some of the sheets that apply

to that section of the line; will you do that?

A. I have before me October 1, 1929. That section is between Walnut Springs and Valley Mills. I have here: Hand Ditching gang, 2 foremen, 50 cents an hour, \$10.00 per day; 24 laborers, 243 hours, \$85.05 a day; powder men, one at 45 cents an hour, 12 hours, \$5.40; truck-driver, one, at 40 cents an hour, 11 hours, \$4.40; one truck, 11 hours, \$8.25. That covers crumming the ditch and clearing the rock for 5,000 yards, using 150 pounds dynamite, and 250 caps, and no fuses, as those caps were electric caps.

Q. How much rock excavation did you have?

A. There was no rock excavation.

Q. So that all of the rock excavation that was actually encountered in this portion of the line was charged to crumming?

A. For the reason that it was machine excavation.

Q. What is crumming?

- A. Clearing the dirt out of the ditch and making a smooth ditch.
  - Q. That was October 1st?

A. Yes.

Q. Can you tell how deep the rock was found in looking at the sheet?

[fol. 3235] A. No, sir.

Q. Turn back to August 27th-do you find that sheet?

A. No, sir; I don't find that sheet.

Q. Can you find this stake number?

A. That is the one I referred to-October 1st.

Q. You didn't show the hand excavation, did you?

A. No, sir; it was all crumming. October 7th, the same location, we had 100 feet of hand-ditching for Highway 67 at Stake 2410 plus 47, and at 30-foot bore, 40 foot casing.

Q. Now, Mr. Steinberger, the record before the Railroad Commission reads as follows: "August 27th, from Stake 332 plus 0-0, to Stake 566 plus 0-0, a total distance of 3400 feet, the hand excavation shows 1700 feet of rock; machine excavation from Stake 412- plus 0-0 to Stake 454 plus 0-0, a distance 1200 feet, less 200 feet skip, or a net perform-

ance of 4,000 feet same day. Trench area 16x30, soil fair, some rock." Can you find from that description the sheet I am talking about?

A. There is apparently an error in the date. I beg your

pardon, I was on Line K-5.

Q. Do you have the sheet now?

A. Yes.

- Q. I want this sheet because I know what you testified on that before. Do you have that now?

  [fol. 3236] A. Yes.
- Q. You show hand excavation of 1700 feet of rock; is that right?

A. 1700 feet of rock, yes, sir.

Q. What cubic yardage of rock was there in that amount of rock excavation?

A. I did not compute it for each individual day, but for the job overall. The individual sheet does not show it, but the detail work sheets show.

Q. How did you get the detail work sheets? Didn't you

compute it from those?

A. The trench area is 16 by 30, as shown on the daily progress reports. The trench area of 16 by 30 times 1700 feet gives the yardage of excavation.

Q. What did you charge all of the labor on this 1700 feet of rock hand excavation to?

A. I charged it to rock excavation.

Q. Now, Mr. Steinberger, I wish you would look to refresh your memory and see if you did not testify before the Railroad Commission, and this question was asked: "How deep was the rock that was being excavated here?" and the answer was: "He didn't state how deep the rock was."

A. Yes.

Q. "He didn't state how deep the rock was. Where there is no cubical quantities of rock shown it is always charged to crumming. Apparently some rock along the line is shown under ditching machine." That is what you testified? [fol. 3237] A. That may be an error, because I have before me the report and when there is no area shown of rock excavation, we took the standard trench area as shown by the ditching machine, which was 16 by 30. We probably were in error and did not charge enough to rock, for the reason that the trench in rock excavation is sometimes

slightly deeper than the standard trench, in order to give four or five inches for bedding on top of the rock.

Q. You had a whole gang working on the job, didn't you? This gang was doing all sorts of work. How did you divide up the labor hours shown for that particular gang for the different sorts of work done?

A. Mr. Fitzhugh, that had to be checked between the stake numbers. If the ditching machine showed a skip it was considered all hand excavation. We had to arbitrarily assume in some cases that some men were doing additional crumming, as all those men were not required to do all of the work with the ditching machine proper.

Q. On this day you had 200 feet of skip?

A. A 200 foot skip on ditching machine; but the ditching machine was at 412 plus 0-0 to 454 plus 0-0, or approximately two miles behind the ditching gang, which I believe it was testified did rock excavation on that date.

Q. What was the next that you had for this particular

day on excavation? [fol. 3238] A. Hand ditching: one foreman, 10 hours, \$5.81; two sub-foremen, 40 cents per hour, \$8.00; 530 labor hours, at 35 cents, \$185.50; powder men, one, 12 hours, at \$4.20; one truck driver, 13 hours, \$3.85; one truck, Company No. 1103, \$13.50; that gang worked from Stake 332 plus 0-0 to Stake 266 plus 0-0. They were working backwards on the line. A total of 3400 feet. Of that, 1700 feet was solid rock. They used 555 pounds of dynamite, 575 caps, and 1307 feet of fuses. Clearing for the ditching machine, one foreman, 10 hours, \$4.00; 13 laborers, 130 hours, \$45.50; one powder man, 11 hours, \$3.85; one truck, 10 hours, Company 1094, \$12.50; 3 teams with driver, 30 hours, \$21.00; one Company car, Ford pick-up, No. 1210, \$7.50. That crew worked from Stake 456 plus 0-0 to Stake 500 plus 0-0, or a distance of 3400 feet, using 100 pounds of dynamite, 100 caps, and 200 feet of fuses, and two air compressors, 33 hours; 3 ditching machines, 3 operators, \$17.90; 3 oilers, \$15.00; 2 stake-setters, \$8.00; one night watchman, 13 hours, \$4.55. Excavated from Stake 412 plus 0-0 to Stake 454 plus 0-0, a distance of 4200 feet, with 200 feet skip. The ditching machines used 65 gallons of gas, 21/2 gallons of oil, and 5 pounds of grease. The ditch was 16 by 30, the soil was fair, some rock. Next, came the laying gang, 2 foreman at \$180 per month,-

Q. That has nothing to do with excavation?

A. No.

[fol. 3239] Q. Now, show where on this sheet you show a separation of the laborers' time for machine excavation, hand excavation, and rock excavation?

A. That was testified to.

Q. You don't show it, do you?

A. I said it was all rock excavation, that particular day.

Q. Don't you have some machine excavation here?

A. Yes; but there was no hand ditching connected with it, because the next day the crumming gang came along.

Q. You don't have a bit of hand excavation?

A. No, sir.

Q. You have nothing but machine and rock excavation on this sheet?

A. That is correct.

Q. Now, then, how did you divide the laborers' time as between machine excavation and rock excavation?

A. Machine excavation?

Q. Yes, sir.

A. The machine excavation was shown under the crumming. Ordinarily, under ditching machine there is no labor; the crumming takes care of that.

Q. Where is your division of laborers' time for machine excavation, rock excavation, and hand excavation?

A. There is no division on this sheet.

Q. Take the next sheet. What is that, August 28th?

A. August 28, yes, sir.

[fol. 3240] Q. What are the kinds of excavation shown on that sheet?

A. Crumming—we will assume that crumming, as it was along there, was shown for either hand excavation or rock excavation. Under ditching machine work, from Stake 454 plus 00 to Stake 494 plus 00, a total of 4,000 feet, with a 500 feet skip, or days performance of 3500 feet, the trench was 16 by 30, except from stake 454 plus 00 to Stake 464 plus 00 it was 16 to 30 inches dirt; from Station 464 plus 00 to Station 465 plus 00, there was six inches of rock; from Station 465 plus 00 to Station 474 plus 00, there was 30 inches of dirt; from Station 474 plus 00 to Station 478 plus 00, six inches of rock; and from Station 478 plus 00 to Station 482 plus 00, thirty inches of dirt. In other words we took the overall trench, and took the distance between

the earth and the rock, and computed that, and threw it into the hand rock excavation, and considered it as rock excavation costs.

Q. On this sheet you have all three kinds of excavation—hand earth, rock, and machine?

A. No, sir. I have testified only to rock and dirt under machine. The ditching machine excavated all of the earth, whereas the rock was excavated by the hand gang.

Q. How did you split the laborers' time for machine exca-

vation and for rock excavation on this page?

A. There were no laborers assigned to the ditching machine.

Q. Can you tell what the laborers' time is for machine excavation?

[fol. 3241] A. There was no laborers' time, other than the operators, oilers, and stake-setters.

Q. Can you tell the time for the machine excavation?

A. Three operators, 30 hours, two at \$6.45, and one at \$5.00 per day; 3 oilers, at 30 cents an hour, \$15.00; two stake-setters, at 20 cents an hour, \$8.00; one night watchman, \$4.55; and two machinists, 23 hours, \$40.25.

Q. Now, there was 3500 feet of performance for the ma-

chine that day?

A. Yes, sir.

Q. It shows right here (indicating)?

A. Yes, sir.

Q. Wasn't there any crumming behind the machine?

A. Apparently not. Whatever crumming there was, was included with rock excavation.

Q. There was some crumming, though?

A. Yes, sir.

Q. But whatever crumming there was you put in rock excavation?

A. That is correct; whereas on other days it may have been offset by slight rock excavation, which was charged to crumming. It is impossible to get it down to the minutest detail.

[fol. 3242] Q. Isn't crumming ordinarily a cost to be included in machine excavation?

A. That is correct.

Q. So that to the extent you have left crumming out in the rock excavation you have understated the performance actually done by the rock excavation gang?

A. That is correct. One day it may be understood on performance and other days overstated, but I have taken the final result-

Q. To that extent you have overstated the number of hours time to excavate on rock?

A. It may be true for a particular day.

Q. That is what I am talking about, and to the extent that you have failed to include crumming in your machine excavation you have overstated the performance for that particular kind of excavation?

A. That may be so, and on the following day it would

be offset.

Q. Now you are trying to say that averaging it day after day it works out even?

A. Yes; so long as you account for the total money and shows your unit cost all the way through, you are correct. [fol. 3243] Q. Well, isn't it a fact, Mr. Steinberger, that as long as you leave out crumming from machine excavation and put it into either hand earth or rock excavation that you could not possibly work out the hours for machine excavation accurately or the performance over all?

A. I may not be able to work it out accurately for a particular day, but for the job over all I think it is as accurate

as it could possibly be worked out.

Q. Well, if you do that day after day won't it come out

inaccurately on the job over all?

A. No, it is offset. Maybe one day it is charged to crumming and other days it is charged to rock, just short stretches, and it will offset itself.

Q. But you did leave out crumming day after day on

those performance sheets?

A. No, sir, I didn't. I will be glad to read to you in the

record a great many on the job.

Q. Well, pick out where you have got any crummingshow on this sheet where you have got any crumming in your machine excavation.

A. Those are the recap. sheets on the daily progress re-

Q. You mean you worked this out from the daily progress reports?

A. Yes, sir.

Q. Those are all computations?

A. Yes, sir.

[fol. 3244] Q. Go ahead.

A. I have a day here, October 29th, we have 671 Labor hours, working from Stake 386-00 to 476-00, a distance of 9,000 feet, charged to crumming, crumming ditch and removing rock.

Q. Well, that is part of your hand excavation cost?

A. No, it is not.

Q. Well, what have you figured that in?

A. It is charged to crumming.

- Q. Well, what did you charge your crumming in—as part of the machine excavation?
- A. Yes, crumming is a part of machine excavation, just like clearing off a ditch is a part of it.

Q. Well, show on the sheet where that ever became a

part of the machine excavation hours.

A. Our construction of Line K-5, E. R. 6943, the total cost for clearing the ditch, machine was \$6,033.47; machine operation, including oiler, stake setter and operator, \$5,249.92; crumming, \$1,564.80, or a total cost of \$12,848.19. The total excavation was 34,867.4 cubic yards, resulting in a direct cost for the ditching machine operation, exclusive of machine depreciation and amortization cost, of 36.85 cents per cubic yard.

Q. Now, that is for August 29th, rather than October 29th?—you said October.

A. Pardon me.

[fol. 3245] Q. It should be August 29th?

A. That is correct.

Q. Now, before the Railroad Commission, in testifying on this same sheet, you said: "August 29th: hand excavation from stake 386 plus 00 to stake 476 plus 00, a total distance of 9,000 feet"?

A. That is correct.

Q. "Ditching machine excavation from stake 494 to stake 542, a total distance of 4800 feet"?

A. That is correct.

Q. "And a 100 foot pick-up and a 900 foot skip"?

A. That is reversed. It is a 100 foot skip and 800 foot pick-up.

Q. "Or a net performance for that day of 3900 feet"—your total performance; that is right?

A. That is correct.

Q. "Now, the trench was rock from stake 494 to stake 459. Apparently there was some loose rock along that line and it did not give any dimension or depth of the rock." Where you said "it" you meant the requisition sheet to show the dimension of the rock?

A. Yes.

Q. "The rest of the trench was all dirt. The explanation under hand ditching is 'crumming ditch and removing rock.' Question: Now, how many hours on that day were [fol. 3246] charged to crumming? Answer: 671 hours charged to crumming"?

A. That is correct.

- Q. Now, on this day these 671 hours are actually charged to crumming in the ditching—in the machine excavation; is that your testimony?
- A. Yes, charged to crumming. There was some rock in connection with that, and that would offset the previous day, when it was rock and nothing charged to crumming.

Q. Now, how many men would that be?

A. Sixty-one laborers.

Q. Now, then, this crumming is simply scraping a ditch?

A. Clearing out any surplus which the machine did not take out of the ditch.

Q. Now, on this day there were sixty-one laborers engaged in cleaning up the ditch?

A. Yes, 9,000 feet—approximately two miles.

- Q. On all the other days on this line you don't show any crumming hours as part of the machine exeavation, do you?
- A. The following day I show 588 hours, which is October 30th—I mean August 30th.

Q. How many machines did you have?

A. The same three machines.

Q. How many men on each machine crumming?

A. They are not charged to the machine; they are not charged to each machine. It is a gang to itself.

[fol. 3247] Q. Well, you have a gang behind each machine, don't you?

A. It may not be in that case. I don't remember, Mr. Fitzhugh, whether it was or not. There may be a crumming gang behind on each ditch. There were 58 men on that day and they may have been split up in three gangs working behind the machines.

Q. Wasn't the laborers' time charged in as part of the machine cost?

A. Yes, that is part of the machine cost.

Q. Find on your sheets some day where you had both hand earth and rock excavation.

A. There is no hand excavation on Line K-5. It was either all rock or the remainder was all dug by the ditching machine, except the few cases I read into the record where there were ditches for highway crossings.

Q. Mr. Steinberger, I don't understand exactly what is taking place. Here are your daily performance sheets sent to you by the foremen in the field. I asked you for data shown in the sheets. Why do you have to look into some other sheets?

A. Mr. Fitzhugh, I look in the recapitulation sheets to save time going through the daily progress reports; I wanted to see whether there was any hand earth excavation on that particular job; that is the reason I refer to my work sheets for the compilation of hand earth.

Q. Where is this line? [fol. 3248] A. It branches from Line K 18-inch approximately 3.4 miles north of Granbury, Texas, goes to Walnut Springs, with a branch that goes to Meridian, Morgan and Clifton and ends at Valley Mills.

Q. Isn't that notoriously rough country?

A. It is rocky country between Granbury and almost to Meridian.

Q. Can you explain to the jury how you could build through such rough country as that without any hand earth excavation?

A. Yes. From the connection at Line K 18-inch to a few miles north of Glenrose it is mostly bottom land and very ideal for machine work, and from there immediately it gets into rough country, and that accounts for a considerable amount of rock excavation and crumming.

Q. Isn't it a fact that there was a good deal of hand excavation, but you have not so classified it?

A. It was not so shown on the daily progress reports.

Q. Well, I am asking you isn't it a fact that you have not classified it as such and that you show no hand excavation on these lines?

A. There was no hand excavation, other than approaches to highway crossings.

Q. Now, Mr. Steinberger, besides studying the six lines that you have shown on the first sheet in your exhibit, you studied a whole lot more lines?

A. 'I testified yesterday, Mr. Fitzhugh, I studied approximately 452 miles of machine excavation.

[fol. 3249] Q. That is all sizes of pipe?

A. Yes, sir, ranging from three inch outside diameter to 20 inch outside diameter.

Q. Now, you have shown in your exhibit here K-5 and K-5-1. Why didn't you show also K-5-2, which you likewise studied?—Do you have to look up your reasons for that, Mr. Steinberger?

A. K-5-2 is a very short branch line. As I testified yesterday, Mr. Fitzhugh, I took the six major lines constructed; I did not take any lines which were merely ex-

tensions of existing lines.

Q. You left this out because it was so short?

A. Yes. I didn't bother with it. There were six major lines studied, and in addition I left out several lines in Oklahoma because they were not listed in Plaintiffs' Exhibit 6.

Q. If you left this out because it was short, why didn't you put in Line "E", which contains about 190 miles?

A. I didn't make any study of Line "E", Mr. Fitzhugh.

I never testified that I made such a study.

Q. Didn't you testify before the Railroad Commission, Mr. Steinberger, that you studied a portion of Line "E" that was built in about 1929?

A. That is correct; a portion of Line "E", Mr. Fitzhugh, and which portion is merely an extension of the existing

line.

Q. Well, what has that to do with it?—it was a sizable [fol. 3250] piece of construction work, was it not?—what difference does it make whether it is a new line or an extension?—it still costs money to excavate.

A. Yes. The actual cost of excavation on that line was \$39,032.00; it was less than \$100,000.00. Let me correct

that statement. It was \$7,888.65.

Q. Now, what about Line K-C-why did you leave it out?

A. Line K-C?—it was merely an extension.

Q. It was a sizable extension, was it not?

A. Twenty-six thousand feet.

Q. You left out Line E-10-5, did you not?

A. Yes, sir. That is 29,000 feet.

Q. And you left out A-1-4, did you not?

A. Yes, sir. I testified on yesterday that that line is in Oklahoma, running from Frederick to Mountain Park.

Q. Well, you wouldn't object to using a line in Okla-

homa for the purpose of finding unit costs?

A. That was not evaluated in Plaintiffs' Exhibit 6.

Q. Well, that has nothing to do with finding construction costs, whether in Oklahoma or Illinois or anywhere else?

A. Well, it was not evaluated in Plaintiffs' Exhibit 6. I had no basis as to the estimate used.

[fol. 3251] Q. Why did you leave out Line O-16? That is

in Texas, isn't it?

A. Yes. It is a very short line.

Q. How short?

A. It's the line from Commerce to Cooper—possibly four miles.

Q. Where is Line 110 located?

A. Line 110 is a line in the West Texas area.

Q. Why did you leave it out?

A. The work that was done on Line 110 was simply an extention to the existing 110.

Q. Why did you leave out Line 18-A?

A. Line 18-A is just another extension going from the Alvord compressing station to the Alvord field.

Q. Why did you leave out Line H-3-2?

A. Because it is a line in Oklahoma.

Q. Why did you leave out Line KCE?

A. That is merely a gathering line.

Q. Where is it?

A. In the West Texas field.

Q. Well, that was evaluated in Plaintiff's Exhibit 6, wasn't it?

A. It was, but it was a very short line.

Q. And there was excavation work on it?

A. Yes.

Q. Why did you leave out Line OLB?

A. That is a gathering line in the Brad field, from the [fol. 3252] Brad compressing station into the Brad field. It is in the West Texas area.

Q. That is in Texas, isn't it?

A. Yes.

Q. Why did you leave out Line Second KC?

A. That is a gathering line, going from the compressing station at Pueblo and is merely an extension and was built after the acquisition of the Pueblo plant by Lone Star Gas Company.

Q. The amount of excavation done on this portion of Line Second KC that you studied was greater than any of the lines included in your exhibit, wasn't it, with the pos-

sible exception of Second B and probably K-5?

A. The total yardage of evacuation on Line Second KC was 17,455.5 yards, as against Second B of 151,515.8 yards.

Q. At least there's more cubic yards on Second KC than on Line L-26, which you included in your exhibit?

A. That is correct.

- Q. Why did you leave out Line AK?
- A. It is a gathering line and not a main transmission line.

Q. It is in Texas, is it not?

- A. Yes; it is in the Panhandle field.
- Q. And it is evaluated in Plaintiffs' Exhibit 6, is it not?

A. Yes.

Q. Why did you leave out E-22?

A. That is a short tap line. I do not recall why it was eliminated but it was 39,000 feet in length.

[fol. 3253] Q. Why did you leave out Line OL?

A. Line OL is a gathering line in the Brad field.

Q. It is in Texas, is it not?

A. Yes, it is.

Q. And it is evaluated in Plaintiffs' Exhibit 6?

A. Yes, and if you are desirous of having me do so, Mr. Fitzhugh, I will be glad to prepare an exhibit and include all those lines that you mentioned.

Q. Now, Mr. Steinberger, where you show on this first sheet, a column entitled book cost, you don't mean to say that those figures are to be found as a part of the accounting records of the company, do you?

A. What sheet do you refer to?

. Q. Page 1 of your exhibit. The same page that we have been talking about all the time.

A. That amount is included in the figure recorded on the company books, yes.

Q. Now, answer my question.

A. Read the question, please.

(Thereupon the following question was read to the witness: "Now, Mr. Steinberger, where you show on this first sheet a column entitled Book cost, you don't mean to say that those figures are to be found as a part of the accounting records of the company, do you?")

A. I answered the question.

Q. You don't mean to say that on Line Second B, for example, you would find a book cost as appearing on the [fol. 3254] books of the company, in the amount of \$156,-650.41?

A. The books of the company show the amount of \$449,288.15 for construction cost. Analyzing that cost, based upon the daily progress reports, this amount of \$156,650.41 for excavation is found.

Q. Well, this figure of \$156,650.41 that you have put in this exhibit as being book cost is not shown on the books of the company, but is a computed figure, as computed by yourself, is it not?

A. Based upon the daily progress reports, yes, in order to get an exact segregation of the various classifications of work.

Q. Are you familiar with the way the book costs for Line Second B appear on the books of the company?

A. Very familiar, yes.

Q. Do you have a copy of the sheet or a copy of the figures as they appear on the actual books of the company for this Line Second B?

A. I have a copy here of the total amount recorded on the company's books, as classified by myself, taken from the daily time sheets, as well as the daily progress reports of construction, and which any auditor or accountant can compile if he takes the time to do so.

Q. Now I will ask you, Mr. Steinberger, if the actual books of the company do not show a segregation for the con-

struction of Line Second B?

A. If they do, they show such a segregation from the time [fol. 3255] sheets only, but not as included in the daily

progress reports.

Q. I am talking about the books of your company—the capital accounts, by lines, as shown by the accounting records of the company for Line Second B, the cost is segregated into various heads, and one of the heads is construction; isn't that right?

A. That is correct.

Q. Now, the sub-heads under this construction head read as follows: Liability insurance, \$5,800.22—

A. Just a second, Mr. Fitzhugh, please-all right, thank

you.

- Q. The next item is labor, \$178,268.93. The next is welding labor, \$49,528.13. The next is welding material, \$47,635.38, and the welding material is separated into divisions as follows: Acetylene, oxygen, carbon, welding rod, welding equipment and miscellaneous supplies, the totals of which are carried into the welding material amount. Following that there shows teaming contract, \$30,807.40. Sundry teaming, of \$25,675.39. Truck earnings, \$17,280.93. Tractor earnings, \$17,956.88. Ditcher earnings, \$23,695.50. Compressor earnings, \$1,449.91. Traveling expense, \$4,569.08. Tools and supplies, \$29,025.81. Are those amounts correct?
- A. I do not have the same division as you have just read. Apparently what you just read is a transcript of the journal entry recording it on the books.

Q. Exactly.

- A. As compiled in the accounting department of the company, and so far as labor is concerned, is merely a sum[fol. 3256] marization of the daily time sheets, whereas I have before me a complete breakdown of the total cost of that line, in the amount of \$1,975,336.64, segregating between the various labor classifications as well as accounting for every item of material.
- Q. So that the division and the amounts that I have just read are the way the construction costs appear on the primary books and records of the company? Is that correct?
- A. That is correct. But Mr. Fitzhugh, it would be impossible to record on the books of the company every individual item entering into the construction of a pipe line.
- Q. All right. Now, in order for you to divide up this labor of \$178,268.93, you had to make an analysis of the daily performance sheets that you got, and from your analysis divide up all this labor, didn't you?
- A. That is correct. What I did, I summarized all the time and expense shown on the daily progress report, and tied it into the total payrolls as recorded by the daily time sheets.
  - Q. So that the amounts appearing in this book cost

column are really not book costs at all, but are computed figures, are they not?

A. They are book costs, and actual out of pocket expenses

of the company.

Q. What do you mean by book costs? Don't you mean

by book costs, the costs as shown by the books?

A. Just because an item does not appear by itself on the books, yet the over-all cost is on the books, it is still a book cost.

[fol. 3257] Q. Wouldn't it have been better if you had headed this column, Actual Cost, as computed by Mr. Steinberger?

A. And total out of pocket expense of the company, yes.

Q. Wouldn't it have been better if you had designated it as the actual cost, as computed by yourself, rather than as book cost?

A. Well, I don't know whether that is a misnomer or not, Mr. Fitzhugh, but it is the book cost and it is the out of

pocket expense of the company.

Q. Well, you don't want to mislead the jury by making them think this amount shows in the exact figure as you have it here in this column, on the company's books, do you?

A. Mr. Fitzhugh, that item of \$156,650.41 is just as much a book cost as One Foxborough Meter, No. A-40509, at a cost of \$112.30, which is located on that particular line, and was an out of pocket cost to the company, but it does not appear on the primary records of the company, but is included in the material cost, under transmission system measuring station equipment.

Q. What was that amount?

A. \$112.30.

Q. Well now, that exact figure would show on the books, would it not?

A. No, that figure does not show on the final investment records of the company; we merely have the total for transmission system measuring station equipment.

[fol. 3258] Q. But to clarify the thing for the jury's benefit, Mr. Steinberger, the books and records for Line Second B do not in any place show the amount of \$156,650.41, that you have here, for the cost of excavation on that line?

A. That is correct. That amount of \$156,650.41 does not appear by itself, but it is included in the over-all cost of

construction.

- Q. Now, turning to your second page. On this page you purport to show a comparison between Plaintiffs' Exhibit 6, and the actual book cost of transmission system property. The total for the various systems shown of \$28,659,795.67 is the total that you took from Plaintiffs' Exhibit 6, is it not?
  - A. Yes.

Q. That is Mr. Freese's evaluation?

A. That is correct, and that is the same figure as appears on page 1, of Plaintiffs' Exhibit 6, under transmission system property.

Q. What is the comparable figure, to compare with this

total, as taken from your evaluation, Exhibit 28?

- A. \$29,217,804.25. That figure was arrived at by taking the total shown on page 1 of Plaintiffs' Exhibit 6, under transmission system property, and on the second page, at the bottom of Defendant's Exhibit 47, of \$28,659,795.67, and adding to that figure the difference in the excavation costs as used by Mr. Freese in his preparation of Plaintiffs' Exhibit 6, and the excavation cost as used in Defendant's [fol. 3259] Exhibit 28, which amount is \$558,008.58. In other words, the evaluation as made by Mr. Freese is \$558,008.58 less for excavation than is shown in Defendant's Exhibit 28, and adding that figure to the amount previously stated gives a total of \$29,217,804.25.
- Q. Now, how much lower is your evaluation, as shown by Exhibit 28, than the book cost figures you have shown on this page of \$31,353,035.54?

A. \$2,135,231.29.

Q. You are making that comparison with the direct structural costs as set forth in Defendants' Exhibit 28?

- A. That is correct. That is based, however, by taking the reproduction cost new, as set forth in Defendant's Exhibit 28, as against some hypothetical cost as set forth in Plaintiffs' Exhibit 6.
- Q. What was that last remark—read that back, will you please?
- A. I mean, instead of cost, as set forth in the reproduction cost new report of Defendant's Exhibit 28, as against some hypothetical reproduction cost report, as set forth in Plaintiffs' Exhibit 6.

Q. Now, the difference between these costs as shown by your Exhibit, and as shown by Mr. Freese's exhibit, is \$558,000.00 you say?

A. Approximately, yes. I believe that figure includes [fol. 3260] some of the Oklahoma lines. I do not have a

complete segregation.

Q. In other words, there is a difference of about two per cent, as between the two appraisals?

A. So far as the physical property of the transmission

A. So far as the physical property of the transmission

system-

Q. Well, that is all we are talking about here on this page, is it not?

A. There is a difference of half a million dollars, which of course is included in the excavation cost.

Q. This column shown on this page is Mr. Freese's direct structural cost, isn't it, and you are comparing that with the direct structural costs as taken from Exhibit 28?

A. Well, it is the direct structural costs as set forth in Defendant's Exhibit 28, with Mr. Freese's adjusted excava-

tion costs.

Q. They are comparable figures, aren't they, in every respect?

A. They are the same figures, except for the excavation

costs.

Q. And the only difference between the two is only about two per cent, isn't it?

A. Two per cent of the total book cost, or two per cent

of the difference?

Q. Two per cent of the book cost?

A. That is correct.

Q. Now, you say Mr. Freese's figure is about eight percent-less than the book cost; is that correct?

A. Yes.

Q. And yours would be about six per cent less, wouldn't it?

A. That is correct.

[fol. 3261] Q. In other words, this whole thing shows that there is not much relation between the book cost and the figuring out of a reproduction value for the same thing?

A. Well, the figures show that Mr. Fitzhugh, but the appraisal, or rather the figures as set forth in Defendant's Exhibit 28 are based 100 per cent on the reproduction cost new basis, whereas the figures used and arrived at in

Plaintiffs' Exhibit 6 in the report itself, is not a reproduction cost new report.

Q. Well, that is your opinion about t, isn't it?

A. Yes.

Q. And that is exactly contrary to what Mr. Freese testified to?

A. That may be true, but I have never seen a report of that kind, and I have seen plenty of reproduction cost new

reports in my day.

- Q. All right; now the two per cent difference between the costs found in your exhibit, or the company's Exhibit 28, and Mr. Freese's Exhibit 6, is more than made up by the allowance in Exhibit 28 for omissions and contingencies. Isn't that correct?
  - A. The difference of half a million dollars?

Q. Yes.

- A. Total omissions and contingencies as used in Defendant's Exhibit 28, covering both Texas and Oklahoma properties——
- Q. Well, wait now, just a minute, Mr. Steinberger. I am talking about the omissions and contingencies that would be included in the lines included in this book cost figure of a total of \$31,000,000.00 plus.

[fol. 3262] A. The total amount of omissions and contingencies as included in Defendant's Exhibit 28, for the transmission system property, including all the property in Texas and Oklahoma, is \$681,416.72.

Q. So that the difference would be explained simply in the item of omissions and contingencies, wouldn't it?

- A. I don't see what the item of omissions and contingencies has got to do with that figure. That is another item of expense. You can not substitute one expense for another, Mr. Fitzhugh.
- Q. Well, I will ask you the question in this way: If Mr. Freese had made the same allowance for omissions and contingencies that you made, he would have gotten a little higher figure than you did, wouldn't it?
  - A. Yes, but that hasn't anything to do with it.
- Q. As a matter of fact, on some of these lines, he did get a little higher figure than you did, anyway?

A. That is correct. Those lines were built away back in 1909 and 1910, and prices were considerably lower, and swere the labor costs.

Q. That's all.

[fol. 3263] Redirect examination.

# Questions by Mr. Griffith:

Q. Mr. Steinberger, sheet 1 of Defendant's Exhibit 47 is a reflection of a comparison of excavation costs with the actual costs, is it not?

A. That is correct.

Q. Now, if you put too much rock into a certain line, of estimated too much rock in any one of the six lines, or to much hand-earth excavation or too much machine excavation, would that make any difference as to the over-all cost of excavation on that particular line?

A. It certain-would not, Mr. Griffith.

Q. Now, Mr. Steinberger, did I request you to prepar this exhibit?

A. You did not, Mr. Griffith.

Q. Didn't you suggest that a proper method of compar son would be to take some one-half dozen of the majo construction projects?

A. That is correct.

Q. And for which you had the actual performance reords?

A. That was my suggestion.

Q. And covering the actual costs incurred by the Corpany?

A. Yes.

Q. And is that what you have set forth on page 1

Defendant's Exhibit 47?

- A. That is just what I have set forth on Defendant Exhibit 47, and if I had used different lines, the different [fol. 3264] would be about the same on the over-all excavation.
  - Q. That's all.

Recross examination.

# Questions by Mr. Fitzhugh:

Q. In other words, to sum it all up, Mr. Steinberger, ye took a little study of about 250 miles of pipe, of all the

sizes of pipe and all trench sizes, where you were not actually able to segregate the laborers hours, for the various classes of excavation, and applied that to the whole system, consisting of 4,000 miles of pipe lines?

A. There is to be exact, 290.6 miles that I have included in this study, and I made an over-all study of 450 miles, which is slightly in excess of about twelve per cent of the total mileage in the system, and I do not know of a better cost basis than the actual experience of the company.

Q. But the figures that you have used were figured out from your study of the 290 miles; isn't that right—on all sizes of pipe?

A. In connection with Defendant's Exhibit 47. The reason that I used the six lines is because they covered all sizes of lines from three inch outside diameter of pipe to twenty inch outside diameter of pipe, and would be typical of the system as a whole system, and if I had used various lines, the difference would have been about the same. You will recall that Mr. Freese's costs that he gave on Line E-5 before the Railroad Commission hearing, were seventy per cent [fol. 3265] below the book costs, and I did not include that line in this study. On Line A-1-4, his costs were about 36 per cent below the book costs.

Q. And on the same line, Mr. Steinberger, how far were you below the book costs?

A. On E-5 I was 37 per cent below the book costs.

Q. Yes, and whatever you might have been below the book costs has got nothing in the world to do with your performance study, has it? You still only studied 290 miles of construction for the purposes of your first page in this exhibit?

- A. I took six representative lines-
- Q. Yes.
- A. Amounting to 290.6 miles in length.
- Q. Yes, sir.

A. And I used them for comparative purposes, because those lines are fairly representative of the lines in the system, covering from three inch outside diameter to twenty inch outside diameter. [fol. 3266] R. L. Thornton, a witness for the defendant, having been duly sworn, testified as follows:

#### Direct examination.

### Questions by Mr. Griffith:

Q. What is your name?

A. R. L. Thornton.

Q. Where do you live?

A. Dallas, Texas.

Q. Are you connected with any banking institution in the City of Dallas?

A. Yes, sir.

- Q. What banking institution? A. Mercantile National Bank.
- Q. Is that a rather sizable banking institution?

A. Medium sized bank.

Q. Having total assets of what amount, Mr. Thornton?

A. About twenty million.

Q. Mr. Thornton, how long have you been engaged in the banking business?

A. About seventeen years.

[fol. 3267] Q. Do you have a general familiarity with the yields commonly and currently expected, demanded and received by investors in securities?

A. I think I do, generally, yes, sir.

Q. In connection with your banking business, have you had occasion to buy and sell and be familiar with the yields on securities of several types?

A. Generally, yes, sir, many varied types.

Q. Do you have a general familiarity with the business of Lone Star Gas Company, the defendant in this case—that is, do you know that it is engaged in the production, transportation, and sale at wholesale of natural gas to some three hundred towns, cities, and communities in southern Oklahoma and in central, northern, and western Texas?

A. Yes, generally, I know those things.

Q. Mr. Thornton, have you had some experience in connection with the financing of natural gas enterprises?

A. We have had some in the smaller companies in that section of the country.

Q. In the general section—in the general southwestern territory?

A. Yes, sir, and some in Arkansas.

- Q. And as the result of the financing of those enterprises, have you become familiar with the security markets, [fol. 3268] in a general way, relating to natural gas securities?
  - A. I would say, in a general way, yes.
- Q. Based upon your knowledge and experience, Mr. Thornton, what net annual rate of return do you think would be necessary for Lone Star Gas Company, in order to attract a free flow of capital for investment in the enterprise, to enable it to raise the money necessary for the discharge of its public service obligations, to support and maintain its credit, and generally to insure the financial soundness of the enterprise?

Mr. Fitzhugh: Just a second. I would like to ask some questions before making an objection.

Mr. Griffith: Yes, sir.

# Examination by Mr. Fitzhugh:

- Q. Mr. Thornton, how many gas companies have you ever had anything to do with, so far as financing is concerned?
  - A. Three.

Q. All small companies?

- A. They are smaller as compared to the Lone Star Gas Company, yes, sir.
- Q. Yes, sir. What was the amount involved in the loan obtained by the largest one?
- [fol. 3269] A. Well, we participated with Lamport & Company, of New York, in the underwriting of the Arkansas & Western Gas, and I believe that was about a million dollar underwriting; I can't remember exactly.

Q. Yes, sir.

- A. The Pecos Valley Gas—we underwrote that ourselves and took all of the issue; that was, I believe, \$450,000.00; and then we have bought into syndicates, but had nothing to do with the underwriting; and Northwest Texas Gas was a small company—we took all of that and underwrote it; and I forget what that amount was, but a smaller underwriting than the others—in bonds, I have reference to.
- Q. You are familiar enough with banking projects throughout the State of Texas, and with the financing done

by gas companies—enough to know that no sizable financing for a gas property has even been given to the bankers of Texas—isn't that correct?

A. Well, I would say it was correct in so far as giving

it to the bankers of Texas.

Q. Yes, sir.

A. I think the bankers of Texas interests have partici-

pated in other underwriting syndicates.

Q. Exactly; but the Lone Star Gas Company has never floated any of the loans for, say, as much as five or ten mil-[fol. 3270] lion dollars, in a Texas bank, has it?

A. So far as I know, not.

Q They take all of that business to Pittsburgh and New York, do they not?

A. I don't know where they take it.

Q. Would you have any idea about the details and couldyou give any sort of an idea as to interest rates that would be required and the conditions of the market generally in the absorption of an issue of first mortgage bonds big enough to build and finance the building of a property claimed to be worth seventy-four millions of dollars—a gas property comparable to the Lone Star Gas Company?

A. I think I have a general idea of what the market would absorb on an issue of a sizable type, because, obviously, if it were a seventy-four million dollar property it wouldn't

be a seventy-four million dollar bond issue.

Q. But you have never participated in any actual financing of a gas pipe line in an amount like that?

A. Not initially, but we bought a large issue of Associated

Gas.

- Q. Yes, sir. Well, the Associated Gas Company is in no way comparable, either in its operations or its location or its business, to the Lone Star Gas Company, is it? [fol. 3271] A. I don't know whether it is or isn't.
- Q. Don't you know what the Associated Gas Company is?
- A. I know generally, but not specifically, because it is a good ways away from us.
- Q. Is it an artificial gas company or a natural gas company?

A. I don't know.

Q. That would mean a world of difference, wouldn't it?

A. What would mean a world of difference?

Q. In the salability of bonds, whether a company is an artificial gas company or a natural gas company.

A. I think it would make a difference.

- Q. You know, as a banker, don't you, that the artificial gas company bonds are considered among the very best of securities?
- A. Well, they may be considered that. I wouldn't say that they were.

Q. That is a very conservative business.

- A. I happened to know of some of them that had to go out of business, and the bonds were not very good at all. Artificial, I have reference to.
- Q. Well, you know that the natural gas companies' bonds are not considered as good investment—
- A. I wouldn't say they were not. As compared to artificial gas?

[fol. 3272] Q. Yes, sir.

A. No, sir, I wouldn't consider them so.

Q. All right.

Direct examination resumed.

By Mr. Griffith:

Q. Mr. Thornton, based upon your knowledge and ex-[fol. 3273] perience, what minimum net annual rate of return do you think Lone Star Gas Company should receive?

A. On its property value?

Q. Yes, sir.

A. Well, I would say not less than eight per cent.

Q. Would that be an absolute minimum?

- A. That would be a minimum after depreciation and depletion.
- Q. A minimum after all proper depreciation and depletion charges?

A. Yes, sir.

Cross-examination.

Questions by Mr. Fitzhugh:

[fol. 3274] Q. Well, without going into detail, then, Mr. Thornton—isn't it a fact that you bank, just like all the

other banks in our country at the present time have a much stronger cash position than they have had in the last twenty years?

A. I think that is generally true.

Q. And there is more money available for loans now than there has been for years and years?

A. For certain types of loans.

Q. Yes, sir. Does the Lone Star Gas Company have any loan outstanding with your bank at the present time? [fol. 3275] A. Yes, sir.

Q. Is that a short-time loan?

- A. A current 90-day loan.
- Q. Is it secured in any way?

A. No, sir, open:

Q. Just an open account?

A. An open loan—an unsecured note.

- Q. Yes, sir; it is just evidenced by a promissory note, is it?
  - A. That is right.

Q. A demand note?

A. No, a ninety day note.

Q. Yes, sir. What rate of interest does this note bear?
A. I can't recall; four or four and one-half, but I wouldn't be positive either way, because I don't recall.

Q. Four or four and one-half?

A. Four or four and one-half, something like that.

Q. Yes, sir. What is the size of the loan?

A. \$25,000.00.

- Q. If I understand you correctly, you have loaned the Company \$25,000.00 for ninety days, at either four or four and one-half per cent?
  - A. Correct.

[fol. 3276] Redirect examination.

#### Questions by Mr. Griffith:

Q. Mr. Thornton, would the current rate or the rate on a current loan, such as this 90-day loan that you speak of, be indicative to any extent of what the Company would have to pay in connection with permanent financing?

A. Not the slightest bearing.

Q. Not the slightest connection?

A. No, sir.

#### Recross examination.

# Questions by Mr. Fitzhugh:

Q. Mr. Thornton, does the Company also have deposits in your bank?

A. I don't think the Lone Star Gas has a deposit with us. I think probably the Lone Star Gasoline Company does.

Q. Well, that is a branch of the Lone Star Gas Company, isn't it?

A. Yes, sir, some subsidiary of the corporation.

[fol. 3277] Q. There is no separation of companies, is there? It is just the Lone Star Gasoline Department of the Lone Star Gas Company.

A. Well, my understanding is it is the Lone Star Gaso-

line Company, some subsidiary of the corporation.

Q. Well, perhaps that is right.

A. Yes, sir.

FRED F. FLORENCE, a witness for the defendant, having been duly sworn, testified as follows:

#### Direct examination.

# Questions by Mr. Griffith:

Q. State your name, please?

A. Fred F. Florence.

Q. Where do you live, Mr. Florence?

A. Dallas, Texas.

[fol. 3278] Q. In what business are you engaged?

A. Banking business.

Q. Do you have a business connection with any banking institution in the City of Dallas?

A. Yes, sir.

Q. Do you have any official connection with that bank?

A. Yes, sir.

Q. What is the official connection, and what is the name of the banking institution with which you are identified?

A. I am President of the Republic National Bank and Trust Company of Dallas.

Q. Is that a sizable banking institution, Mr. Florence?

A. Well, it is the second largest financial institution in the Eleventh Federal Reserve District.

Q. And what is embraced and included in the Eleventh

Federal Reserve District?

A. All of the State of Texas, part of Louisiana, and the southern part of Oklahoma, and part of Arkansas.

Q. Mr. Florence, how long have you been engaged in

The banking business?

A. Approximately twenty-eight years.

- Q. Are you generally familiar with the yields commonly and currently expected, demanded, and received by investors in the several classes or types of securities?

  [fol. 3279] A. I think so.
- Q. In connection with your banking activities, have you had occasion on behalf of the banking institutions with which you have been identified, to buy and sell securities in large amounts?

A. Yes, sir.

Q. Have you ever participlated in any natural gas financing?

A. Yes, sir.

Q. Are you able to recall the financing in which you did participate?

A. I have in mind now the Houston Gulf Gas Company.

Q. Will you speak out just a little louder, Mr. Florence?

A. The Houston Gulf.

Q. The Houston Gulf Gas Company?

A. At Houston, a natural gas company there.

Q. That is a natural gas pipe line company transporting gas from the Refugio County Field to the City of Houston, is it not?

A. Yes, sir.

Q. Do you have a general familiarity with the business of the Lone Star Gas Company, Mr. Florence—that is, do you know generally that the Company is engaged in the production, purchase, transportation, and sale at wholesale of natural gas to some 300 towns and cities in the southern [fol. 3280] part of Oklahoma and in northern, central and western Texas?

A. Yes, sir.

Q. I believe, Mr. Fitzhugh, in addition to being President of the Republic National Bank & Trust Company, you are also connected with the Dallas Clearing House, are you not?

A. Yes, sir.

Q. Do you occupy any official position with the Dallas Clearing House?

A. I am President of the Dallas Clearing House Association.

\*Q. What is the Dallas Clearing House Association?

A. It is the association of all of the banks of the City of Dallas.

Q. Mr. Florence, based upon your knowledge and experience, what net annual rate of return would be necessary for Lone Star Gas Company in connection with its public service business?

A. Will you state that question again, please, sir?

Q. Based upon your knowledge and experience in connec-[fol. 3281] tion with the yields on securities commonly accepted, demanded, and received by investors in securities, what net annual rate or return do you think Lone Star Gas Company should be entitled to receive?

A. You mean upon its property values?

Q. Yes, sir.

A. I should say a minimum of eight per cent upon its investment.

Q. And that would be a minimum net annual return?

A. Yes, sir.

Q. And would that be after all depreciation and depletion charges had been taken care of in connection with operating expenses?

A. Yes, sir.

Q. And do you believe that a minimum rate of eight per cent for net return would be necessary to insure the financial soundness of the Company and to support and maintain its credit?

A. And to protect its securities in the hands of its investors, I do, at least that, yes, sir.

Cross-examination.

### Questions by Mr. Fitzhugh:

Q. Mr. Florence, your bank has in connection with it an [fol. 3282] investment department, does it not?

A. It had until recently; we have just recently discontinued the active operation of the investment department.

Q. But you are thoroughly familiar with the marketing of investment securities as it is done in Dallas?

A. Yes, sir.

Q. Did you bank, at the time the Lone Star Gas Corporation floated its issue of Debenture Fives, participate in the marketing of those securities?

.A. Yes, sir.

Q. Did you have any trouble selling those bonds to the public?

A. At that particular time we did not.

[fol. 3283] Q. Now, those bonds were absolutely unse-

cured, were they not?

A. Well, they—except by the credit of the Lone Star Gas Corporation and certain indentures restricting their operations and activities upon a certain basis. There were a good many conditions to it. They were not secured as to any specific security, but the conditions and covenants in connection with the flotation were quite definitely worked out.

Q. You mean there were certain sinking fund provisions for the retirement of the loan, but there was not behind it a single dollar's worth of property for the bondholders to go back to in the case of default on the issue, was there?

A. It was predicated—I think that is correct; that is my

recollection.

Q. Now, those bonds only had a five per cent coupon, didn't they?

A. That is correct.

Q. Don't you know, as a matter of fact, as a banker, Mr. Florence, that an investor, or rather a borrower of money, who is able to give good security for his borrowing, can always get a lower rate of interest?

A. That would not always follow.

Q. If I were to come to your bank and seek to make a loan, giving you only a promissory note, wouldn't I have [fol. 3284] more trouble getting that loan, and wouldn't I be likely to have to pay a higher rate of interest, than if I came with tangible security, say, a house and lot, or a bond, or some other sort of collateral to put up to cover my loan dollar for dollar?

A. That is not correct, for this reason: You can take the International Cement Company—their bonds are selling down to about 85 right now, but that corporation can go in to any bank in the country and borrow short-term money today at less than one per cent, although their bonds are selling at a discount.

Q. I am not talking about that. I am talking about the

relative difficulty that any borrower of money would experience at the same time as between in one instance having security for the loan he attempts to make, and in the other instance having no security.

A. You have reference to the same borrower in both

cases?

Q. Yes, sir.

A. It would altogether depend upon many factors. There are times when they could borrow as cheap on a straight debenture, and yet varying conditions might make a change.

Q. As a general thing, as a banker, you know that you do not pass up an opportunity to get a little security for your

loans?

[fol. 3285] A. We don't presume to make anything but good loans.

Q. I am talking about good practice, and the usual practice, and the ordinary practice—any banker tries to get a loan secured?

A. No, sir; we loan to many concerns on their open note. Of course, if we didn't think they would be good, we would ask for security.

Q. You don't mean that you would rather have an unsecured loan than a secured one?

A. I could name you dozens of firms that we would just as soon have their open notes—General Motors, for instance, and I could name you dozens of similarly situated concerns, where we would take their open note any time.

Q. What is the most your Company ever loaned to the Lone Star Gas Company?

A. I think as high as five hundred thousand dollars.

Q. I will ask you this question: In the making of that loan would you have rather have had an open promissory note unsecured for \$500,000.00, or one wherein the Lone Star Gas Company pledged in a deed of trust a first mortgage upon some, say, two million dollars worth of its property?

A. Well, I will tell you what we did-have; and that is probably the best answer.

Q. All right.

A. We would not have loaned the Lone Star Gas Com-[fol. 3286] pany five hundred thousand dollars on a mortgage, but we loaned it that money as a temporary loan for current operative purposes, with the definite understanding that it would be paid in January or February, when their receipts came in. We would not have made that loan under any other conditions.

Q. Your bank was simply dealing in short-time paper,

and not trying to do any financing for the Company?

A. That is correct.

Q. But suppose you had been undertaking a loan of some size, say in the amount of five hundred thousand dollars, that was to run for sometime, would you have just as soon as accepted the Lone Star Gas Company's promissory note unsecured, or would you have insisted upon some sort of tangible security?

A. As a general thing, in banking, a secured obligation is more desirable than an open obligation; but there are

many exceptions to that rule.

- Q. Exactly. Now, if you were able to sell the Lone Star Gas Corporation's debenture five's, unsecured as they were, wouldn't you have had an easier time in selling a first mortgage bond of the Lone Star Gas Corporation, assuming that there was seventy-four million dollars worth of property behind the issue, and that the issue of first mortgage bonds only amounted to thirty million dollars, or less than half the total assets, if those bonds had borne five per cent coupons, or the same as the debenture issue? [fol. 3287] A. Well, at that particular time there was a market situation involved in it, and that was a frenzied speculative market on the part of the public, where they were buying any sort of security, and not going into the full details and operation records of the Company as carefully as today; and, as a result, there was lots of financing went on at that time that should not be considered a criterion of what financing-sound financing is today. the time that financing was done, it was considered to be sound; but frankly, today, that would be considered very unsound from a financial investment point of view.
- Q. Have you sold any of the bonds of gas companies that have been lately sold?

A. None that I have sold recently, no.

Q. There has not been any financing in gas companies, has there?

A. Not of any consequence.

Q. So there is not any way to judge what would have been done in the case of gas companies at the present time?

A. Well, I think those experienced would have a pretty good idea as to about what would have been done.

Q. Have you participated directly in any financing of

gas companies in this section of the country?

A. As I stated we had been interested in some of the syndicates and took some of the bonds of those I mentioned.

[fol. 3288] Q. Have you taken any bonds other than those?

A. From time to time we have taken what we call banking syndicate participations in reasonable amounts, but not large amounts. We have never been very strong on gas securities.

Q. How big is the Houston Gas Pipe Line Company?

A. I have not been in touch with it recently, and I could not tell you.

Q. What kind of security was behind the bonds in that

A. They issued about every kind of conceivable security at one time or another, straight bonds, closed first mortgage bonds, and others. I think we were interested in the closed first mortgage bonds.

Q. The closed first mortgage bonds?

A. Yes, sir.:

Q. It was a junior issue to several others, was it not?

A. No; it was a six per cent closed first mortgage issue that we were interested in.

Q. Of what maturity?

A. I don't recall.

Q. You are not able to say whether there had been prior issues?

A. This particular issue, my recollection is that it was a first mortgage bond issue. Probably they were allowed to issue more later.

[fol. 3289] Q. So this issue was not a closed issue?

A. Well, as I said, I would not want at this time to testify as to the exact facts concerning that issue, as it has been a number of years ago, and I would not want to say now just what it was; that is just my recollection. I would not say positively as to any of the details pertaining to that or any other issue.

Q. You know that it makes a world of difference whether a mortgage is a closed mortgage on specific property, or an

open mortgage that can be extended by additional issues that can be marketed from time to time?

- A. There is a difference, but whether it affects it favorably or unfavorably would depend upon the particular situation.
- Q. All of the sales ever made in Dallas, whether by your company, or any other company, are simply trades made over the counter in the various investment banking departments, are they not?
  - Q. How do you mean?
  - Q. There is no exchange in Dallas, is there?
  - A. No, sir..
- Q. When you buy bonds you simply buy from some issuer of securities or perhaps some investment banking house, and then sell them off your shelves, just like a grocer sells off sacks of flour?
- A. That is the general way we used to do, but not any more.

[fol. 3290] 'Q. There are no sales made over an exchange in Texas anywhere, is there?

- A. I think that is correct.
- Q. Are you familiar with Fitch's Manual?
- A. Yes, sir.
- Q. That is a manual that records the actual sales made on the New York Stock Exchange or on the New York Curb, is it not?
  - A. I think that is correct.
- Q. It does not record any of the sales made as over the counter sales in New York, Chicago, Boston, Pittsburg, of other cities of the United States?
- A. I doubt if I would be qualified to state what Fitch's Manual contains.
- Q. It does record the actual sales on the Exchange, though?
- A. That is my general understanding.
- Q. Since it is based on that, it could not include over the counter sales?
- A. I am not sufficiently familiar with Fitch's Manual to testify intelligently on it.
- Q. Maybe you can tell me this: Aren't at least ninety-five per cent of the actual sales of bonds and securities,

which would include all of the unlisted securities, made by over the counter sales, rather than sales actually made on the exchange?

[fol. 3291] A. Well, as to sales made on bonds listed on the Exchange, they are largely based upon prices prevailing on the Exchange; and those not listed on the New York Exchange are more or less sales over the counter. That applies as a general rule, subject to exceptions, of course.

Q. And the unlisted, are none of them sold through the

Exchange?

A. No. sir.

Q. But are all sold over the counter; isn't that correct?

At Generally speaking.

Q. And the unlisted bonds very greatly out-number the listed bonds both in the amount of issues and the number

of issues; isn't that correct?

A. Well, if you are talking about the bonds, whether they are listed on the New York or other bond exchanges, as compared with all other bonds not listed on any exchanges, or course, there are more not listed than listed, taking the country as a whole; that is, in numbers; but not necessarily in amounts.

Q. That being true, Mr. Florence, a study of simply the sales of listed securities—that small class of bonds actually listed on the exchanges—would not serve to show

the general market condition, would it?

A. Well, it would be, in my opinion, the truest index as to market condition. It is not the smallest group; upon [fol. 3292] the New York Exchange are listed the largest bond issues in this country.

Q. Well, anybody can list bonds?

A. But they cannot control the price of them.

- Q. All you have to do to list a bond is to furnish the Exchange officials the data that will satisfy their requirements?
- A. There is a good deal more to it under this Federal Securities Act right now.
  - Q. And pay your fees?
  - A. Yes, sir.
  - Q. And what else?

A. All sorts of reports are required by the Federal Government as to the listing of any securities on the Exchange.

Q. That is the only difference between the listed and unlisted—fulfilling of requirements of the exchange, and payment of the fees?

A. I don't think that would be a fair statement to make as to exchanges, because I think exchanges perform a necessary function in industry, and they impose a great many conditions upon corporations as to supplying information concerning their affairs, that unlisted securities do not have to give at all.

Q. Does the Company have any loans with your bank at

the present time?

[fol. 3293] A. I think they have a small loan at this time.

Q. What is the rate of interest charged?

A. I think they have a loan of fifty thousand dollars—current loan; and according to my recollection of the rate, it was five per cent, and we later reduced it to four or four and a half per cent—I am not sure about the rate. Of course, that is purely a current and temporary loan.

Q. You agree, do you not, that the banks of the country, generally, are maintaining a much stronger cash position then they formerly had?

A. Yes; sir.

- Q. And that would reach as far back as a twenty-year period, would it not—that is the liquidity of the banks as compared with the twenty-year period previous would show a greater amount of cash and liquid securities on hand than ever before?
  - A. I should think so, yes, sir.

Q. About what are the assets of your bank?

A. Something in excess of seventy million dollars.

Q. You are about the biggest bank in this part of the country, are you not?

A. As I said, the second largest, according to the figures of the Eleventh Federal Reserve District.

Q. Notwithstanding the fact that you are one of the [fol. 3294] largest banks in Texas, you have never been allowed to participate in the financing of any of the gas companies connected with the Lone Star Gas Corporation, have you?

A. Our participation in those securities has been to take care of the demands we had from our customers for the securities. We have never been very favorably inclined

to those types of securities, because we consider them quite speculative.

Mr. Fitzhugh: That is all.

Redirect examination.

#### Questions by Mr. Griffith:

Q. Would the rate on current loans be indicative at all of the coupon rate or yield in connection with securities

issued for permanent financing?

A. It would not. As I just mentioned, in the case of the International Cement Company, whose 5 per cent bonds are selling at 80 cents on the dollar, yet they can borrow money at three-quarters of one per cent.

Q. That would be on a short loan?

A. Three or six months loan.

Q. You stated that natural gas securities were considered speculative?

A. Yes, sir.

- [fol. 3295] Q. I will ask you if bankers and investors generally regard the natural gas business as a hazardous business, Mr. Florence?
- A. I so regard it; and I think it is so regarded by conservative bankers as being fairly speculative and hazardous. It has proven that way over a period of time.

[fol. 3296] Cross-examination.

# Questions by Mr. Fitzhugh:

Q. In making your answer as to the rate of return you think this company would have to have, have you been informed as to the gas reserves the company has?

A. Well, I have taken that in the light of my experience over a long number of years as a practical thing. As a matter of fact, I do not believe this company, even if they had an authorized return fixed by the State of Texas, that it could float any sizable bunch of securities at this time at any rate of interest up to that amount.

Q. Well, now, answer my question, if you don't mind. Do you know what the gas reserves of the company are at

the present time?

A. Of the Lone Star Gas Company?

Q. Yes.

- A. I could not answer that question.
- Q. Do you know what the estimated life of the gas reserves is?

A. I could not answer that.

Q. Do you know what the earnings of the company were

last year?

A. Well, I have seen, of course, the figures, and I see them almost daily in our bank, as to the reserves and the estimated life of their gas and the exact dollars of their earnings and everything like that, but, doing business with so many companies, I don't remember them exactly. We [fol. 3297] have in our bank a complete report, but I don't remember the figures, nor those technical questions. For the purpose we had at the time they were satisfactory to the Credit Department.

Q. Do you know what the value of this company's properties are—or is?

A. Well, it is reputed to be considerably up in the millions of dollars.

Q. Yes, sir. Do you know the exact amount?

A. Well, I have heard all sorts of figures talked about.

- Q. Well, when you say what rate of interest this company would require for the floating of any loan you have to take into consideration its financial condition?
  - A. Oh, indeed so.

Q. Well, now, what do you consider the assets of this concern to be?

A. Well, on paper they are one thing and what I would make loans on would be another, but they are supposed—I have heard the figure mentioned since I have been here, somebody sitting out there a while ago, seventy million dollars.

Q. Did you make your calculations assuming that to be

the true value of the property?

A. Well, I don't have the figures in my mind, but it happens our bank has a number of loans on stock of the Lone Star Gas Corporation, and we have from time to time been concerned about it and we have made a study of it and of [fol. 3298] the net result of it, but I don't attempt to carry those figures in my mind; but, based on the information I have available, the statements I have made would govern.

Q. You mean that stock of the Lone Star Gas Company

has been deposited in your bank for loans?

A. In reasonable amounts from time to time. It is worth, about five dollars a share—that is, of the Lone Star Gas Corporation, not the Lone Star Gas Company.

Q. I see.

A. No, we have never had any Lone Star Gas Company stock.

Q. Do you know what the operating expenses of the company were for the year 1933?

A. I would not want to attempt to testify as to any specific

figure.

Q. Do you know what the amount available for return after allowance for operating expenses and depreciation

was before payment of Federal income tax?

A. Well, I dare say that I could not give you that information concerning a specific company unless I had it currently and had just gone over it. We have not had under consideration recently any question involving that particular information—having that particular information available; in other words, I have not been devoting any time to the Lone Star Gas Company whatever in our bank.

[fol. 3299] R. L. Thornton, recalled by defendant, testified further as follows:

Direct examination.

### Questions by Mr. Griffith:

Q. You are the same R. L. Thornton who just previously testified in this case?

A. Yes, sir.

- Q. I forgot to ask you, Mr. Thornton, your official connection with the Mercantile Bank of Dallas.
  - A. President.
- Q. How long have you been President of the bank—ever since its organization?

Mr. Griffith: Now we want to call Mr. A. P. Holloway.

124-3104

A. P. Holloway, a witness for defendant, having been duly sworn, testified as follows:

[fol. 3300] Direct examination.

## Questions by Mr. Griffith:

Q. Your name is A. P. Holloway?

A. Right.

Q. Where do you live, Mr. Holloway?

A. Dallas, Texas.

Q. In what business are you engaged?

A. Steel business.

Q. With what steel concern are you identified?

A. Jones & Laughlin Steel Corporation, headquarters Pittsburgh, Pennsylvania.

Q. Is that one of the major steel corporations of the United States?

A. It is.

Q. It is one of the larger manufacturers of plain end steel pipe and threaded and coupled steel pipe?

A. It is.

Q. How long have you been in the steel business?

A. Since the fall of 1907.

Q. In other words, over a period of twenty-seven years?

A. Correct.

Q. What is your official connection with the Jones & Laughlin Steel Corporation?

A. District Sales Manager.

Q. As District Sales Manager of Jones & Laughlin Steel Corporation, what is the scope of your activities and the gen-[fol. 3301] eral scope of your duties?

A. Sales work, sales promotion work, field work, in Texas,

Oklahoma and New Mexico.

Q. In other words, then, as District Sales Manager of Jones & Laughlin Steel Corporation your territorial jurisdiction extends over the State of Texas, the State of Oklahoma, and the State of New Mexico?

A. Right.

Q. Are you familiar with the current prices of steel pipe, of both plain and and threaded and coupled pipe?

A. I am.

Q. Prior to the time that you came on the stand were you handed by some representative of the Lone Star Gas Com-

pany a copy of an exhibit which has been introduced in evidence here and styled Defendant's Exhibit 33 and showing on the title cover "Lone Star Gas Company—Pipe Prices—Large Lots"?

A. I was.

Q. Do you have a copy of that exhibit with you?

A. I do not.

Q. Well, will you take this copy, Mr. Holloway, and examine it?

A. This is the copy that I examined.

- Q. This is the copy that you examined. Have you checked the large lot prices on steel pipe as set forth in Defendant's Exhibit 33 to determine whether those were the large lot prices which were current as of June 11, 1934, and current as of this date, to-wit: July 11, 1934?

  [fol. 3302] A. I have.
- Q. Are the prices as set forth in Defendant's Exhibit 33 the correct prices for large lot deliveries and sales of plain end steel pipe and threaded and coupled pipe as of June 11, 1934, and continuously down to the date that you are now testifying?

A. They are.

[fol. 3303] Q. Mr. Holloway, I will ask you this question: Are the prices for the purchase of large lots of pipe as set forth in Defendant's Exhibit 33 the absolute, rock-bottom prices and to which no price discounts are applicable?

A. They are.

Q. If the Lone Star Gas Company were today in the market for extremely large quantities of pipe could any discount be obtained below the quoted prices for steel pipe in large lots as set forth in Defendant's Exhibit 33?

A. They would not, and unless the tonnage which you speak of were for a specific project this price basis would [fol. 3304] not apply and higher prices would apply.

Cross-examination.

Questions by Mr. Fitzhugh:

Q. Mr. Holloway, what is the price today of plain end 18-inch 53.223 pounds per foot pipe? Wait a minute. Can't you answer without checking up?

A. No, sir, absolutely, I could not. I have checked those figures.

Q. How?

A. Checked them by my schedules and various other methods of computation.

Q. Have you your schedule with you?

A. No, sir.

Q. When did you check those?

A. Last night until three o'clock this morning.

[fol. 3305] Q. Do you mean to say that you went through every pipe price in that exhibit in that time?

A. I checked it and found the basis for figuring correct.

Q. But you didn't check the prices, did you?

A. Absolutely checked prices.

Q. Each price?

A. I went over it and used the basis, and from there on it is mechanical.

Q. Mr. Holloway, don't you know it would take about three weeks to check each price in that book?

A. It would not.

Q. Has the Lone Star Gas Company ever bought any steel pipe from you?

A. Yes, sir.

Q. In very small quantities?

A. In very small and very large quantities.

Q. What is the largest amount they bought from you?

A. I could not say.

Q. Do you mean that they bought from you through your department or from the Jones & Laughlin Steel Corporation at Pittsburgh, which?—did they buy from you or from Pittsburgh?

A. Through the general office in Pittsburgh.

Q. So you didn't handle the transaction at all?

A. Not through my office.

Q. You don't know what discount they got on the purchase?

A. If they were purchased during the period expressed in [fol. 3306] this report here, they got those prices and no other.

Q. Well, can you refer to an actual purchase of pipe made by the company for a major pipe line job during the year 1932 or the year 1933? A. No, sir.

Q. Can you back of that time?

A. No.

Q. You can't give any actual purchase?

A. No.

Q. Now without knowing the actual purchases, how would you know what discounts have been?

A. Discounts would be in line with the discounts at that

time.

Q. Well, you mean if discounts were applied in connection with the quoted discounts?

A. They would be applied.

A. They would be applied.

[fol. 3307] Q. Mr. Holloway, don't you know that your company, whenever it sells pipe to any of the Lone Star Gas Companies, the Lone Star Gas Company or the affiliated companies which are the underlying companies of the Lone Star Gas Corporation, as well as when your company sells pipe that goes into the Columbia Gas & Electric system, that you deal directly with Mr. Simpson?

A. That is my understanding; I am in the district office.

Q. Now, you don't have anything to do with those transactions, do you?

A. No.

Q. Do you know Mr. Simpson?

A. Not personally.

Q. Have you ever seen him?

A. If I have seen him it was many years ago.

Q. Can you give an instance of an actual purchase of pipe at any time from your company, where the Lone Star Gas Company actually paid your company the quoted price?

A. I can not.

Q. Where is the main office of your company?

A. Pittsburgh, Pennsylvania.

Q. Where is your main plant?

- A. We have two plants, one at Pittsburgh and one at Aliquippa, about twenty-five miles down the Ohio River from Pittsburgh.
- Q. Now, Mr. Holloway, a letter has been written by engineers for the Commission, to try to find out the discounts that apply on pipe. Assuming that the information ob-

tained reads as follows, I wish you would answer if this [fol. 3308] information is substantially correct; the letter reads as follows:

"Referring to your telegram received in Bethlehem in regard to discounts on pipe, I called at your office several times since returning to tell you but found out that you would not be back for several weeks and that you may need this information now. I found out that the discount is the same to all carload buyers on pipe. However, any pipe mill can lower their prices in a specific quotation for an identified project and then file the new price and maintain that price for the balance of the current quarter in which the price was quoted. Thus, if Mr. Simpson wishes to buy 6,000 tons of pipe, the chances are very likely that any one of the mills would give him a special price and then apply that price for the balance of the quarter. This information is secured from two pipe mills. The information received at Washington was that the prices would all be the same, regardless."

And there are then some parts of the letter referring to the Code, and which have been ruled out in this case. Now, I will ask you if the part that is read substantially states the facts?

A. You are referring to operations under the Code, are you?

Q. I am talking about the present prices that would apply,

and the discounts.

A. Which is under Code regulations. Any member of the Code may file a new price, and the price to become ef[fol. 3309] fective ten days after the date of filing.

Q. Then that price would be maintained for the rest of

the quarter as to that company, wouldn't it?

A. Up to June 11th that is not true, because the price might have been advanced on June 11th, or June 30th, rather; the Code was amended effective on May 30th—

The Court: Let's stay out of the Code, gentlemen, and talk about prices as they exist.

A. It was amended effective June 11th, and in that particular amendment the prices were filed for the quarter.

Q. So that if a purchase of pipe were made as of today for an identified project, in an amount, or in a considerable amount, as detailed in this letter, the chances would be likely that one of the mills would give a special price to the purchaser or would change their quoted price and allow the prices to remain in that way for the balance of the quarter?

A. No, I would not answer your question Yes in that

way—

Q. Well, do you know?

A. The chances are not likely that would occur. There is a possibility but it is not likely; it is not a probability.

Q. Within the last few days, and to be specific: within the last week, haven't the prices on steel gone down?

A. In certain instances.

Q. Well, steel prices in general have gone down within the last week, have they not?

A. No, sir.

Q. In what instances have they gone down? [fol. 3310] A. On bars, plates and shapes.

Q. That is reinforcing bars?

- A. Well, merchant bars or reinforcing bars, and structural steel.
  - Q. How about the prices on steel pipe?

A. No change.

Q. Now about all you are able to say, just to sum up this exhibit here—what's the number of that?

A. No. 33.

- Q. Just to sum that up, all you are able to say about Exhibit 33 is that there have been copied off of the price sheets the quoted prices, correctly, and incorporated into that exhibit?
- A. I have analyzed this report and found the basis of calculation is correct.

Q. All right; that's all.

Mr. Griffith: Mr. Holloway, I will ask you if the pipe prices shown in Defendant's Exhibit 33 for large lot purchases apply to every other purchaser as well as Lone Star Gas Co?

A. That is correct.

Mr. Griffith: In other words, that is the rock bottom price for large lot purchases for every buyer?

A. That's right.

[fol. 3311] Mr. Griffith: Mr. Ed. C. Connor is recalled as a witness on rebuttal.

Ed. C. Connor, having been recalled as a witness for Defendant, testified as follows:

Direct examination.

#### Questions by Mr. Griffith:

Q. Mr. Connor, there has been some testimony here presented by witnesses for the State, or a witness for the State and the Railroad Commission to the effect that the business of the Lone Star Gas Company was quickly developed. Have you prepared any compilation showing the rate of development of the business of the company on major transportation lines?

A. I have.

Q. Will you produce it, please? (Witness produces copies of exhibit). Is this the compilation to which you refer?

A. It is.

Q. Being styled on the title cover, "Lone Star Gas Company. Historical Rate of Business Development, Major Transportation Lines"?

A. That is correct.

[fol. 3312] Mr. Griffith: We offer in evidence the compilation so identified by the witness. Are there any objections by counsel for the State?

(Thereupon the document above referred to was marked as Defendant's Exhibit 48.)

Q. Mr. Connor, in Defendant's Exhibit 48 have you shown a history of Line K, Line O to Lisbon, Texas, and Line L and L System, and Line E from Gainesville to Paris?

A. That is correct. The designation of the Line O to Lisbon refers to the section of Line O lying east of Lisbon.

Q. Refer, please to the first page of Defendant's Exhibit 48. What have you shown in connection with the history of Line K?

A. I show the total deliveries by years in M. C. F. of gas transported through Line K.

Q. Commencing in the year 1920 and coming through the year 1931?

A. That is right.

[fol. 3313] Q. Why did you not carry it through the year 1933, Mr. Connor?

A. There would have been no substantial difference in the deliveries through Line K subsequent to the year 1931.

Q. In other words, by reference to the years 1927, 1928, 1929, 1930, and '31, as shown on this page, were the deliveries nearly the same for each of those years?

A. That is correct. Line O and Line K carry what is usually termed the base load of Lone Star Gas Company's system and their deliveries are more or less uniform from

year to year.

Q. Now, it is noted that the deliveries through Line K were at their peak in the year 1925, and that the deliveries through the Line fell off in the next year. To what was that attributable?

A. The completion and placing in operation of Line O, which is an eighteen inch line parallel to Line K, which relieved Line O of the responsibility of carrying the entire deliveries of gas of the major transportation line.

Q. Don't you mean that Line O relieved Line K?

A. Line K, yes, that is what I intended to say.

Q. Now, commencing with the actual historical deliveries of gas through that Line, what does this first page indicate?

A. It indicates that Line K went through a period of very slow development with reference to the gas transported through it, beginning in the year 1920 and ending—

Q. Was that the year the Line was constructed? [fol. 3314] A. That is correct; and ending during the year 1924.

Q. In other words, the business or the gas deliveries through that Line were not built up until a period of four years had elapsed from the date of the original construction?

A. Five years.

Q. Fiye years?

A. Yes, sir.

Q. Now, what is meant by KA delivery as shown in the second column of page 1 of Defendant's Exhibit 48?

A. Line K is the line which runs from the central West Texas area through Joshua Junction. In 1920 the Line extended only through Lipan. Deliveries at that time were wholly from production in the Mineral Wells district through Line KA, and deliveries have been made into Line K from KA from that date. The line was subsequently extended, and deliveries were then made at Gordon, as well as at KA, and the division between the deliveries at KA and at Gordon merely indicates the points at which the gas was delivered into the Line K.

Q. Refer to the second page in Defendant's Exhibit 48, and also to the third page, Mr. Connor. What do you show

on those pages?

A. I have shown the dates at which various towns on Line O east of Lisbon were attached,—in the first column indicating the town, in the second column the date at which [fol. 3315] the particular town was attached. The subsequent columns indicate the domestic and unaccounted for gas recorded in each town attached, by years. The consummation of those totals of sales is shown on page 3, and is expressed as a per cent of the maximum year, which was the year 1932.

Q. I did not get your answer, Mr. Connor.

A. I said that on page 3 there is shown a consummation of the domestic and unaccounted for sales in the individual towns, by years, together with the percentage indication of the ratio of the sales for each year to the sales of the maximum year, which occurred in the year 1932.

Q. Now, when was Line O constructed, or rather this

portion of Line O?

A. It was put into operation in 1926.

Q. And for the first year what was the per cent of the total developed business which the line acquired?

A. 5.81.

Q. That was for the year 1926?

A. That is correct.

Q. In 1927 what percentage of the total business had the Line acquired?

A. 42.66 per cent.

Q. In 1928, what per cent?

A. 72.57 per cent.

Q. And giving the percentages for the several consecutive years following.

[fol. 3316] A. 1929, 86.91; 1930, 93.03; 1931, 94.42; 1932,

100 per cent.

Q. Now, what does that historical study indicate, Mr. Connor?

A. That historical study indicates the cumulative effect

of the rate of attachment of towns, the rate of attachment of customers, and the normal increase in consumer use, as reflected by the deliveries of a major transportation line.

Q. And your study extended over a six year period, did

it not?

A. That is correct.

Q. Or rather, to be more exact, it includes seven years?

A. That is right,-including part of the year 1926.

Q. Refer next to the page styled, "Historical Idle Plant, L System, Annual Domestic Sales, Thousands of Cubic Feet", and to the page immediately following on which the L System is continued. What do you indicate on those pages?

A. I indicate the summation of that portion of the deliveries on the portion of the L System extending from Joshua Junction to the City of Waco, from the time that that portion of the Line L was constructed in 1920 through the year 1932. Now, in the preparation of this tabulation a slightly different method was pursued than that which was used in the preceding tabulation. The maximum year was determined by the maximum sales in each individual town on the System, without respect to the particular year in which the maximum sales of the individual towns occurred; and the consummation of the maximum sales in each individual town is shown to be 2,048,691,000 cubic feet. Of course, it would not be probable that there would be a coincidence of [fol. 3317] the maximum sales in any group of towns in any one year; therefore there would never have been a 100 per cent saturation on Line L, using that method as a basis; however, the percentage of the use of the Line, assuming 100 per cent to be when each town during the same year used its maximum amount of gas, is shown on the fifth page of the Exhibit/

[fol. 3318] Q. Mr. Connor, on the fifth page of the exhibit, where you show a total for the L System, do you show the rate of growth and attachment of the business as far as domestic sales were concerned for the entire L System by calendar years?

A. No; I dont. That portion of the line which is included in this study is the line from Joshua Junction to Waco, Texas.

Q. It is not the entire L System?

A. No; that would require a disintegration of the system into the individual branches, and a study of the individual

branches. This portion of the L System that I have included is common to all of the deliveries taken into the L System.

Q. What per cents do you show for the respective years

for the total of maximum sales to each town served?

A. 3.7, 23.7, 27.7, 31.6, 35.2, 40.1, 43.5, 45.5, 65.02, 87.85, 95.08, 91.08, and 91.13.

Q. Now, that covers the years 1920 to 1932 in order, does it not?

A. That is correct.

Q. As you have stated the percentages?

A. That is correct; and the exhibit should be further explained by the fact that prior to the year 1927 the actual domestic sales of the City of Waco were not available.

Q. And you made an estimate of the volume of sales for [fol 3319] the City of Waco for the calendar years 1920 to

1926, inclusive?

A. That is correct; and the method by which the estimate was made was extremely conservative, for the reason that we took the rate of growth in Waco for 1926 forward and projected it backward upon the same rate of growth. The rate of growth of such a city as Waco will slow up after gas has been introduced for a number of years.

Q. Will you refer, please, to the last page in the exhibit showing Line E from Gainesville to Paris, Texas. Now, in the first column have you set forth the towns that are served off Line E from Gainesville, Texas, to Paris, Texas?

A. I have.

Q. What does the second column headed "Date" indicate?

A. That indicates the year in which the particular sales

-domestic sales, as indicated, were made.

Q. Does it indicate the date on which the sales of domestic

gas were started in these various towns?

A. That is correct. In so far as the year 1925 is concerned, that is the first gas that was passed through the line. Each succeeding year indicates the attachment of certain towns, and the amount of gas which was sold for domestic purposes or unaccounted for in the individual distribution systems.

[fol. 3320] Q. You show a tabulation of the rate of growth and attachment of business, commencing with the year 1925,

and ending with the year 1932?

A. That is correct. The study shows, however, that the maximum consumption was reached in the year 1930.

Q. That was a period-

- A. That was a period of six years after deliveries were begun.
- Q. In other words, it was not until the end of the sixth year that you had a complete saturation?

A. Five and a small portion of a year.

Q. Mr. Connor, have you examined Plaintiff's Exhibit 6, same purporting to be a reproduction cost new appraisal as of June 15, 1934, covering the Texas Gathering, Transmission, Compressing, and General Property of Lone Star Gas Company?

A. I have, yes, sir.

[fol. 3321] Q. In that exhibit, in connection with the determination of Taxes and Interest during Construction, do you understand that Mr. Freese adopted and applied any wholesale construction period?

[fol. 3322] Q. In his computation of Taxes During Construction, did Mr. Freese adopt a wholesale construction period, as reflected by his exhibit 6?

A. He did not.

Q. Mr. Connor, in connection with Defendant's Exhibit 28 did you adopt a definite wholesale construction period of time within which the property of the Company would be reconstructed or reproduced?

A. I did.

Q. Now, I am asking you, Mr. Connor, as an engineer, if a reproduction cost new appraisal necessarily presupposes the adoption of a fixed and definite wholesale construction period.

A. It is my opinion that that would be necessary in con-

nection with making a reproduction cost estimate.

- Q. And other than in the appraisal prepared by Mr. Freese or his firm, have you ever seen any reproduction cost appraisal which does not assume a fixed and definite wholesale construction period or time within which the property would be built?

  [fol. 3323] A. I have not.
- Q. What is the effect upon the computation of Taxes and Interest During Construction by failing to adopt a fixed

and definite period of time within which the property would be built?

A. It materially reduces the item of Interest During Construction, and practically eliminates the item of Taxes During Construction:

Q. Can you give an example—a simple example which

will illustrate that point?

A. Yes. Take a property such as the distribution system of the Austin Gas Company.

## The Court What?

A. The Austin Gas Company. Property of that kind is built up historically by small increments, the amounts of which depend upon the current demand of customers for main extension and services. Those small increments can be built and completed within a very short period of time from the construction standpoint, and the amount of time involved in each increment which goes to make up the whole property would be such as to reduce the amount of interest on the property during construction to practically nothing. and to eliminate taxes during construction altogether. For instance, let us assume there are ten thousand services in the City of Austin-and by service I mean that portion of [fol. 3324] the main distribution system which takes the gas from the main pipe in the street to the customer's meter. Now, those services can be constructed in about half a day, or an hour each, and that is the way they are built historically; and so for the ten thousand services which would be required to deliver gas to the consumers in Austin, the construction period by the piecemeal method would be three or four hours. Now, on the wholesale reproduction program contemplating the reproduction of the property as a whole such a situation could not properly apply.

Q. Now, the illustration that you used for historical building up of the gas distribution system here at Austin might it be compared in a small way with a ten-story brick

building, building it a brick at a time?

A. The analogy is somewhat comparable, yes.

Q. If Mr. Freese had adopted a wholesale construction period of two or three years for the reproduction of the property, what would have been the effect upon his allowance or estimate for Taxes or Interest During Construction?

A. They would have been materially increased, I believe, following his own method of computation.

Q. You have examined Plaintiffs' Exhibit 6, have you

not, being Mr. Freese's appraisal?

A. Yes; I have.

[fol. 3325] Q. Have you noticed that the General Overhead and Undistributed Costs estimated by Mr. Freese, and determined and set forth in that exhibit, amount to approximately ten per cent of the Direct Structural Costs of the physical property?

A. That is correct; they do.

Q. In your judgment as an engineer, Mr. Connor, on wholesale construction would an allowance of approximately ten per cent for general overhead and undistributed costs be ample?

A. It would not; it would be utterly inadequate.

Q. Mr. Connor, is there any difference between historical Overhead socalled on costs built up by piecemeal construction, and Overhead Costs on wholesale construction, particularly where the piecemeal construction has been carried on by an organization which devotes part of its time to construction and the remainder to operation?

A. There is a substantial difference.

Q. What is that difference?

A. The difference is that the Overheads, if properly allocated, in the case of a property which has been built up over a long period of time, in connection with an operation of the property by a trained personnel, would result in Overhead charges substantially less than those which would be necessarily incurred in the reproduction of the property on a wholesale basis. The illustration which I gave in con-[fol. 3326] nection with Interest and Taxes During Construction, relative to the piecemeal construction of the Austin Gas Company's property, would be equally applicable to the Legal, Administrative, and Other General Expenses, because the Austin Gas Company could extend a main one hundred feet today, and another main a hundred feet tomorrow, with no modification of its operating personnel, and the operating personnel could carry on that work along with their responsibilities; and such could not be the case if the property would be reproduced as of a given date.

[fol. 3327] Q. If a witness for the State has testified in this case, Mr. Connor, that his allowances for general and undistributed costs were determined in some measure by the actual general and undistributed costs capitalized on the books of the Lone Star Gas Company during certain years, would that, in your opinion as an engineer, be a criterion of the general and undistributed costs which would be incurred in a wholesale construction on a new project?

A. They would not.

Q. For what reason?

A. For the reason—and I feel that I have answered that question very largely in a previous answer; and that is, that the trained operating organization can absorb a substantial amount of construction responsibilities along with their other work, and to measure what would actually take place in a reproduction of a property, when the property was not operated, by that method, is an improper basis upon which to proceed.

Q. During recent years has the Lone Star Gas Company [fol. 3328] had a trained personnel which could efficiently

construct large natural gas projects 2

A. It has.

Q. And has utilization been made of that personnel?

A. And utilization has been made of that personnel.

Q. And was a great part of that personnel mainly engaged in operation of the Company, as well as construction of pipe line extensions and other projects?

A. That is correct.

Q. Mr. Connor, have you examined Plaintiffs' Exhibit 7, which is an estimate of annual depreciation allowances as of June 15, 1934, covering the Texas Gathering, Transmission, Compressing, and General Property of the Lone Star Gas Company?

A. I have, yes, sir.

Q. Now, the calculation of depreciation reserve accruals, as set forth in Plaintiffs' Exhibit 7, is upon the sinking fund method, is it not?

A. Very largely, yes; but not altogether so.

[fol. 3329] Q. What is the effect, Mr. Connor, of the use of the sinking fund method as applied to a natural gas property?

A. It is in a large measure to deprive the owners of the

property of the use and benefit of such accruals as are made in the reserve account.

- Q. Is that due to the fact that the accruals in such accounts are not free capital?
  - A. That is correct.

Q. Is there any other reason?

A. No, that is sufficient, because that deprives the owners of the use of the accrual.

- Q. Will you refer, please, Mr. Connor, to page two of Plaintiffs' Exhibit 7. In connection with certain property appearing on that page, does it appear that an amortization has been provided for over a thirteen year period?
  - A. That is correct.

Q. Is that true in relation to the Gathering System Rights-of-Way, Field Measuring Station Structures, Field Measuring Station Equipment, and Field Line Equipment?

A. That is correct. The amortization set out is not complete, however, but provides for what the witness determined to be the total loss or ultimate loss on abandonment.

Q. Does the adoption of that thirteen year period for amortization purposes presuppose a life of gas wells of thirteen years?

[fol. 3330] A. An average life of gas wells according to the testimony of the witness, because he predicated the life of well lines upon what he considered the average life of the gas wells.

[fol. 3331] Q. Mr. Connor, is there any factual basis for the assumption of the average life of gas wells and gas lines as thirteen years?

A. No, I don't think that there is, Mr. Griffith, and if the average life of gathering lines and the wells was thirteen years it would not have any particular bearing upon the rate of replacement.

Q. Why do you make that statement?

A. For the reason that in properties such as gas wells or pipe laid in the ground it is my opinion that the average [fol. 3332] life of those units of property is not a necessary factor which controls the rate of replacement of those units of property.

Q. In other words, are the replacements, abandonments, and removals of such pipe brought about in large measure by factors other than the average life of steel pipe?

A. That is correct—in a great measure caused by factors other than the average life of gas wells, as clearly indicated by the proportionate amounts of mortalities which have taken place in fields in which the average life of gas wells exceeds that of other wells.

Q. In what fields is that true—what has the history of the company or the experience of the company been in that connection?

A. By far the greatest number of replacements and abandonments has taken place in the Petrolia Field.

Q. And have those lines been replaced at a rate greatly in excess of the rates at which the wells have been abandoned?

A. Oh, yes. Well lines are removed for a great many other reasons.

Q. What are some of the reasons for which well lines are removed other than depreciation of the pipe?

A. Well, failure of a line; that is one of the causes, of course. Another cause is the necessary rearrangement which takes place in a system of well lines in any given field. Well lines become too small by reason of the decline in [fol. 3333] the pressure in an open field of the wells to which they are attached. It quite frequently becomes necessary to change from a high pressure connection to a low pressure connection. All those things affect the replacements and removals; they are not controlled by the life of the line.

Q. Will you refer to page eleven of Plaintiffs' Exhibit 7? Does the curve on that page indicate an average service life or service life for steel pipe of thirty-three and one-half years?

A. Thirty-three and a half years, I think is correct; yes.

Q. From any data or information which you have been able to assemble from any source, Mr. Connor, is there any factual basis for the assumption of thirty-three and one-half years as the service life of steel pipe?

A. No. As I said before about gas wells, if the average life of steel pipe were thirty-three years or fifty-three years or seventy-three years, it would not be a factor which would

necessarily control the natural rate of replacement of steel pipe.

Q. Because so many other factors bring about those

changes and abandonments; is that correct?

A. No, because of the fundamental fact, and that is the failure of steel pipe due to a physical condition, is functional with the passage of time and the location in which the pipe is situated. When a replacement of pipe is made the replacement does not follow the average of the system, but follows the experience of the pipe that it replaces, be-[fol. 3334] cause it goes back into the same soil conditions that the pipe which has corroded was in.

Q. In other words, will the mortalities be greater in connection with the replacements than in connection with the

original construction?

- A. Yes, because the pipe replaced, as I said before, will not follow the average but will be controlled largely by the local conditions.
- Q. Will you refer, please, to page twelve of Plaintiffs' Exhibit 7? For the calendar year 1931, or in the column right above the calendar year 1931, certain replacements are shown in connection with Lines J and C; is that correct?
  - A. That is correct.
- Q. Are you familiar with thos- replacements of Lines J and C which were made in the year 1931?

A. I am, yes, sir.

Q: Were those replacements of a kind and character which will be experienced in the future by the company?

- A. Oh, yes. However, in Exhibit 42 all the replacements for Line C were not included in the segregation of replacements due to the condition of the pipe, except such portion as was actually junked at the time of removal. Of course, all of Line J that was removed at that date was junked.
- Q. Now, Mr. Connor, were there any removals in 1932 brought about for the same reasons that the removals were [fol. 3335] brought about in connection with Line J for the year 1931?
- A. I think those removals, Mr. Griffith, were in 1933, and I think you refer to the replacements on Line L made necessary by internal corrosion of the pipe. There were practically no replacements of pipe in 1932.
- Q. In 1933 did the company have replacements on Line J-2 similar or for causes or for reasons which were essen-

tially similar to the causes which brought about the removal of part of Line C in 1931?

A. That is correct.

Q. What brought about the removal and replacement of the pipe on Line J-2 in the year 1933?

A. The reconstruction of the highway between Dallas

and Fort Worth.

Q. Well, can you indicate to the jury on Defendant's Exhibit 29, back of you, which is the pipe line map, and tell us where those replacements were made?

A. Here is the county line of Dallas County—from the

City limits to the County line on J-2.

- Q. Mr. Connor, have you attempted to make some analysis of the reserve accrual rates as set forth in Plaintiffs' Exhibit 7?
  - A. I have.
- Q. In connection with those accrual rates is there any consideration given to excess cost of replacements over wholesale construction?

A. No, there is not.

[fol. 3336]. Q. As a result of your experience and study, Mr. Connor, have you determined that the costs of replacements of steel pipe are in excess of the cost of wholesale construction in connection with the initial installation of pipe?

A. That is correct.

Q. To what extent, Mr. Connor?

A. Approximately 50 per cent.

- Q. And have you made an analysis of the costs of such replacements covering a considerable volume of work?
  - A. I have, and I have testified concerning those costs.
- Q. I believe you testified in that connection with your direct examination previously?
  - A. That is correct.
- Q. Mr. Connor, if the public service plant and property of the company are to be depreciated by deducting the observed depreciation from the cost new of the property in this or in any other proceeding, would it be proper to apply the the sinking fund method as determined by Mr. Freese in connection with the depreciation reserve accruals as set forth in Plaintiffs' Exhibit 7?
  - A. It would not.
  - Q. For what reason?
  - A. Because you would be depriving the owners of the

property of the use of the money set aside for the purpose of offsetting the decline in per cent of new condition and [fol. 3337] would be deducting the loss due to decline in

per cent in new condition.

Q. Mr. Connor, have you prepared an exhibit showing a comparison of the calculated mortalities of steel pipe as set forth in Plaintiffs' Exhibit 7 with the actual experience of the company—that is, the Lone Star Gas Company, in connection with such mortalities?

A. I have.

Q. Mr. Connor, is this the exhibit to which you refer, it being styled on the title cover "Lone Star Gas Company— Comparison of Historical Replacements, Removals and Abandonments, Main, Tap and Field Lines with Calculated Replacements, Removals and Abandonments"?

A. That is correct.

Mr. Griffith: We offer in evidence the exhibit so identified by the witness.

(Thereupon the document above referred to was marked as Defendant's Exhibit No. 49.)

Q. Mr. Connor, what have you set forth in the first page of Defendant's Exhibit 49?

A. All the results of certain calculations set out in detail on the subsequent pages, up to and including Table 4.

Q. Will you please explain the basis and method for the comparisons which you have made in Defendant's Exhibit 49—that is the comparison between the historical mortalities which the company has actually experienced in connection [fol. 3338] with steel pipe and the mortalities as calculated by Mr. Freese in Plaintiffs' Exhibit 7?

A. Perhaps it would be better to take the individual tables and make an explanation of them, and then refer to their application to the summary. In Table 1 there is an application of the replacement rates shown on page four of Plaintiffs' Exhibit 7 to the pipe in the system of Lone Star Gas Company which had reached the age indicated—in other words, pipe which had been in twenty-two years, which is the oldest complete service year—there has been applied a percentage determined by accumulating the replacement rates from one to and including twenty-two years shown on page four of Defendant's Exhibit 7.

[fol. 3339] Q. In what column on page 4 of Plaintiffs' Exhibit 7?

Column 2 of Plaintiffs' Exhibit 7. Now, Column A in A. Table One indicates the miles of equivalent three inch diameter pipe which were in service in the Lone Star Gas Company's system for various service years. There has been an adjustment made in the actual service life of Lines B and Line C, by reducing their service life two years an account of the fact that in 1917 the pipe in these two lines was taken out of the ground, thoroughly cleaned, rehabilitated and repainted from end to end and put back into the ground, and I have only allowed a reduction of two years to the service life of that pipe on account of that rehabilitation, and I think any calculation which did not take that into account would be misleading. I have also deducted from the footage of pipe in the system of Lone Star Gas Company that pipe which was acquired from The Texas Company in the year 1927. I make a separate and particular application of the necessary replacement rates to that pipe. I have also deducted the pipe which had been in service in prior years and which had been replaced, or at least it is not included in this particular table but it is given in another table. The cumulative replacement rates from Column 2, page 4 of Plaintiffs' Exhibit 7, when applied to the miles of pipe in service for the corresponding service year, gives the calculated replacements in miles of equivalent three inch pipe. Now, that is equivalent to this assumption: that at the beginning of the operations of Lone Star Gas Company [fol. 3340] the rates set out by Mr. Freese were put into effect, from the very beginning of the company's operation.

Q. In other words, you assumed the actual rates, or you applied the actual rates which Mr. Freese set forth in Plaintiffs' Exhibit 7?

A. That is correct. Assuming that the company started out and had decided that those rates were the correct rates to set up to provide for the replacement, removal and abandonment of steel pipe in the mains, the main lines and the tap lines, the calculated replacements which would be due primarily to the condition of the pipe would be 337.75 miles for twenty-two service years, taken from table 1. Now, table 2

Q. That is on the third page in Defendant's Exhibit 49?
A. That is correct. Table 2 deals with a different mat-

ter, and that is the allowance made for the major removals in the fourth column of page 4 of Plaintiffs' Exhibit 7, which is set out to be .289 per cent per annum. Now, I have made an adjustment in that rate, because as I interpreted the adjustment of Mr. Freese, that he gave effect to a salvage, resulting in a loss of only about 741/2 per cent—in other words. the entire property would not be lost. Therefore, the actual rate would be higher than the indicated rate in column 4 on page 4 of Exhibit 7, and that rate which I have used is not the rate shown in that column, of .289 per cent, but is .3882 per cent per annum. Now, I have applied this rate to all of the pipe which is in the system, including the pipe purchased from the Texas Company in 1927, as well as other pipe which had been removed prior to January 1, 1931, and [fol. 3341] have put back in the earliest year that pipe which I moved up two years on account of its rehabilitation.

Q. That is the pipe in Lines B and C?

A. Yes, for the reason that the removal of pipe might not be so materially affected by the fact that it had been repainted. So, applying then— Or, I have assumed now that each year of the company's history from the beginning, they set up this .3882 per cent to take care of removals—major removals and removals due to public requirements and changed operating conditions, and that results in a calculation of 320.83 miles of pipe removed, and that would be the number of feet of miles of pipe which would have been provided by the application of that annual accrual to the feet of pipe in service each year from the beginning of the company's operations.

On Table Three, I give effect to the pipe which was purchased from The Texas Company in 1927, to which I have just referred and which was excluded from the pipe in service on Table 1. Now, the reason that I made a separate study of this pipe was this: The pipe was older than pipe which might have been installed in 1927, but it was only in the plant of Lone Star Gas Company from 1927 forward. In other words, I gave effect to the age of the pipe as well as to the number of years that it was in the service of Lone Star Gas Company. Now, I went to the records of The Texas Company and ascertained when that pipe was actually installed—each line—and have given effect to that fact. [fol. 3342] For instance, some of the pipe was installed in 1912, and so I have assumed that the pipe, so far as Lone

Star Gas Company was concerned, was in service from the fifteenth to the 20th year of its life, inclusive, even though it was purchased by Lone Star Gas Company in 1927. Then, the cumulative replacement rates for those service years inclusive, taken from Column 2, page 4, Exhibit 7, are shown in Column B, table 3. Applying those rates to the miles of pipe, expressed in terms of three inch equivalent diameter, give the calculated replacements which would have taken place in that pipe, and the results are shown in Column C of table 3, Defendant's Exhibit 49.

Table 4 sets out the calculated mortalities or replacements which would have taken place in pipe which had been in service for a number of years but which was not in service as of January 1, 1933. In other words, I have given effect to pipe which was in service, and in which replacements might have been made while it was in service, but which is no longer in service, or has been removed from the main transmission system or the tap lines of the company. I have applied to that pipe, after ascertaining the date at which that pipe was originally installed, the proper annual replacement rates cumulative taken from Column 2, page 4, Plaintiffs' Exhibit 7. The calculated replacements, removals and abandonments as developed from Tables 1, 2, 3 and 4 are carried forward to page 1 of the Exhibit, and [fol. 3343] show that for the twenty-two year period following the first complete year of operation of Lone Star Gas Company, that the calculated replacements, removals and abandonments, or the accrual which would have resulted from the application of those accrual rates would have been equivalent to 685.47 miles of three inch equivalent diameter pipe, or expressed in feet of three inch equivalent diameter pipe, it would be 3,619,287 feet. Now, the actual replacements, removals and abandonments of steel pipe in the main lines and the tap lines of the Lone Star Gas Company for that twenty-two year period, was 5,854,744 feet, or in other words, had we proceeded from the very beginning and applied those rates for the specific purposes as set out on page 4 of Plaintiffs' Exhibit 7, we would have provided for only 61.8 per cent of the actual replacements, removals and abandonments which have taken place in the main lines and tap lines of the Lone Star Gas Company.

Q. And the calculations which are set out in Tables 1 to 5, inclusive, in Defendant's Exhibit 49, are carried forward to

the summary on the first page of the Exhibit?

A. That is correct. Table 5 deals with the subject matter shown on page 6 of Plaintiffs' Exhibit 7, wherein it is set out that an annual rate of 2.77 per cent, when applied to the gathering lines of Lone Star Gas Company, would provide for all replacements, abandonments and removals, and would in addition create at the end of twenty years a credit balance of 76.98 per cent of the footage of pipe in service at that time.

[fol. 3344] A. In the case of the field lines, I have taken the footage of field lines which Lone Star Gas Company had from the first year that they have had a field line in service, and I have accumulated the additional footage by years, through the year 1932, and it so happens that the period of time from the time that the Lone Star Gas Company had its first installation of field lines, through the year 1932, is exactly twenty years; and which period corresponds to the period during which it is estimated in Plaintiffs' Exhibit 7 that the property would be amortized by means of the 2.77 per cent accrual rate.

I have applied the 2.77 per cent each year to the footage of pipe in service each year, as shown by table 5, but it so happens that beginning in 1920 the replacements, removals and abandonments of field lines became greater, substantially, than the 2.77 per cent accrual, and by the year 1922, instead of having a credit balance in the amortization fund, there would have been a-substantial deficit, and at the year 1932, at the end of the twenty year period, instead of accruing an amortization fund representing some 76 per cent [fol. 3345] of the company's property in that particular property classification, there would have been an actual deficit in the reserve account.

Q. Now, the deficits concerning which you have testified are found in the column headed E, on table 5 of Defendant's Exhibit 49?

A. That is correct. If the company had started out in 1913 and set up this reserve accrual according to that plan, the company would have been without any credit balance in the reserve for the amortization of that property at the end

of the twenty years, but instead would have had more replacements than the accrual had provided for, and there would be an actual deficit in the reserve accrual.

# Mr. Griffith:

Q: Mr. Connor, do you subscribe to the allocation of property as made by Mr. Hulcy in connection with Defendant's Exhibit 46?

A. I certainly do. I collaborated with Mr. Elmer Schmidt in the preparation of the report upon which that property allocation was based.

Q. And in your opinion is the allocation made upon the

proper basis?

A. It is. It is the only method by which an accurate allocation could be made of the joint and/or concurrent use [fol. 3346] of property in the transportation of gas, transported wholly within the State of Texas, and gas transported from Oklahoma into the State of Texas.

Q. That's all.

[fol. 3347] P. M. Biddison, a witness for Defendant, recalled, resumed the stand and testified as follows:

Direct examination.

#### Questions by Mr. Griffith:

- Q. Mr. Biddison, you testified in connection with your qualifications that you were familiar with the rate of development and attachment of the business of natural gas properties?

  [fol. 3348] A. I did.
  - Q. And you do have such a familiarity?

A. I do.

Q. In your opinion, is there any such a thing as going value, going concern value, or cost of reproducing the business of a natural gas property?

A. Certainly there is.

Q. In your opinion, does Lone Star Gas Company have

going value or going concern value, and would it cost money to reproduce the business which the company actually has?

A. In my opinion, it has going concern value to a high degree, and I know that it costs money and takes time to develop business on a system such as the Lone Star Gas Company's system.

Q. Are you generally familiar with the cost of reproducing the business or determining going value or going concern value, as set out in Defendant's Exhibit 28, and as determined by Mr. Ed C. Connor?

A. I am.

Q. Do you subscribe to and approve the method used by Mr. Connor in estimating the cost of reproduction of the business?

A. I do, and I think an estimate of cost of reproduction of the business is a true measure of the amount of going concern value.

The Court: Just a moment—state that answer again; I did not hear it, Mr. Biddison.

A. I think the cost of developing the business is a true

measure of going concern value.

The Court: Thank you sir; I didn't understand what you [fol. 3349] said the first time.

Q. In connection with your own experience, in connection with natural gas properties, have you had occasion to observe the historical growth of the business of those natural gas properties, Mr. Biddison?

A. I have, and I had occasion to do so in connection with

the properties of the Lone Star Gas Company.

Q. When was that, Mr. Biddison?

A. During the period from 1914 to 1919, during which period I acted as consulting engineer to the Lone Star Gas Company.

Q. And was the rate of attachment of the business of Lone Star Gas Company gradual over those years?

A. It was.

Q. The Lone Star Gas Company started out in business in the years 1909 and 1910, did it not?

A. That is correct.

Q. The principal markets of the company at the inception of the construction of the company's pipe lines were Fort Worth and Dallas, were they not?

A. That is correct.

Q. Was all of the business in Fort Worth and Dallas immediately acquired upon the construction of the company's pipe line facilities and the delivery of gas at the city gates of Fort Worth and Dallas?

A. It certainly was not.

Q. Did it take time and money in which to acquire that business?

[fol. 3350] A. It took time and money, and during the period during which this business was being acquired in Fort Worth and Dallas, there were facilities of the company not used to capacity, which had to be constructed in advance of full capacity use on which fixed charges ran.

Q. And is that the reason why you believe that the fixed charges on idle plant may in some measure constitute a yardstick for the determination of the cost of reproduction

of the business of the company.

A. Yes.

Q. In connection with your experience with other natural gas properties, have you observed, Mr. Biddison, that invariably the business of the company, even when all direct structural costs have been incurred, and the plant is completed and operable, that the business is not immediately attached?

A. I have so observed it, and that rate at which business can be attached is somewhat dependent upon the size of the community and also somewhat dependent upon whether or not the community has previously had manufactured

gas service.

Q. Would you say that it is the invariable rule, Mr. Biddison, that it takes a number of years for any natural gas property to acquire full development of its business, both with respect to customer use of gas and customer saturation?

A. Yes.

Q. Mr. Biddison, have you examined Plaintiffs' Exhibit 6?

[fol. 3351] A. I have.

Q. What is the effect of the deductions by Mr. Freese in Plaintiffs' Exhibit 6, on the excavation costs as determined by you for the same properties, and as evaluated in Defendant's Exhibit No. 28?

A. In Exhibit 28 we evaluated the total public service properties. Plaintiffs' Exhibit No. 6 evaluated only a portion of them. The net result in making the correction which Mr. Freese has attempted, is to produce figures for the construction of the lines shown in his exhibit, far below what I think it is possible to construct those lines for.

Q. Is that true in connection with his excavation costs?

A. It is.

Q. I believe that Mr. Steinberger testified, this morning, that the total amount of Mr. Freese's deductions covering excavation costs, approximated \$550,000.00; is that correct?

A. I have not checked it myself as to his Exhibit 6, but I have checked the application of his costs against the Lone Star Gas Company's system in its entirety.

[fol. 3352] Q. And what is the result of that check?

A. The result of that check is to decrease the construction costs on excavation in the amount of over \$588,000.00.

- Q. That would be covering only the property which Mr. Freese evaluated in connection with Plaintiffs' Exhibit 7, or 6?
- A. No; that is comparing the prices used by Mr. Freese in his Exhibit 6, to the excavation required on the Transmission System shown in Exhibit 28.

Q. You are referring to Defendant's Exhibit 28?

A. Yes, sir.

Q. Now, Mr. Biddison, if Mr. Freese—you understand that Mr. Freese adopted all of your construction costs except excavation costs?

A. Yes, sir.

Q. And that Plaintiffs' Exhibit 6 so shows?

- A. Yes, sir, with this exception, that there was a slight modification of hauling costs. That was a comparatively small modification.
  - Q. That would not amount to many thousands of dollars?

A. No, it would not.

Q. Now, if it connection with the preparation of Plaintiffs' Exhibit 6 Mr. Freese actually used large lot prices for pipe, current as of June 15, 1934, what would be the [fol. 3353] effect upon the painting, laying and testing costs, and other costs included in pipe line construction?

A. I have not analyzed that for all lines.

Q. Have you analyzed it for a portion of the pipe lines or the transmission line equipment evaluated by Mr. Freese in Plaintiffs' Exhibit 6?

A. I have; I have picked some lines that I consider to be representative lines, to show the effect of that assumption. Consider, for example, 18-inch dresser pipe in Line A, pipe weighing 59.032 pounds per lineal foot, which is estimated in our Exhibit 28 to cost \$303.9440 per foot (per 100 lineal feet)\* installed. This is based on a pipe price, f.o.b. Texas common points, including mill inspection as of January 1, 1934, of \$237.8443 per 100 lineal feet.

[fol. 3354] A. This is further based upon a total cost for installation, including all contingencies, of \$66.0997 per 100 lineal feet. Now, this figure may be arrived at by deducting the pipe price which I have quoted, f.o.b. Texas common points, from the cost per 100 lineal feet, installed, which I quoted. Now, if the pipe price be assumed to be that of June 11, 1934—

Q. That is the same price which existed on June 15, 1934, did it not, the date as of which Mr. Freese prepared Ex-

hibit 6?

A. It is; and we deduct that figure from the \$303.9440, this pipe price being \$248.4086, we have left for installation, including all contingencies, \$55.4634 per 100 lineal feet. Now, this is the amount of money which would be available for that construction work in our Exhibit 28, if we attempt to include in that pipe prices as of to-day. Now, of that \$55.4634 per 100 lineal feet, our estimate for [fol. 3355] the trench cost in Exhibit 28, is \$26.3838, which allows, when deducted from the \$55.4634 only \$29.0796 per 100 lineal feet. If we add to this last figure the cost of trenching based upon the units costs assumed by Mr. Freese we have a cost for trenching of \$23.4026 per 100 lineal feet, which produces a total installation cost, based upon Mr. Freese's cost for trenching work and upon the prices of pipe as of to-day, of \$52.4822, or 521/2 cents per lineal foot for the installation charge on 18-inch dresser couplered line; and 18-inch dresser couplered line cannot be laid for any such price. I understood Mr. Freese's testimony to be that he believed the allowances for omissions and contingencies used in our Exhibit 28 would offset the differences in pipe prices. In this particular instance the difference in pipe prices is \$10.6363 per 100 lineal feet, while the allowance for contingencies as used in Exhibit 28 is \$7.4133 per 100 lineal feet. If we consider, further, 18-inch 53.223 pound dresser couplered pipe in this same Line A, we arrive at an installation cost of \$45.3181 per 100 lineal feet for that dresser couplered pipe, based upon Mr. Freese's unit costs for trenching, and based upon the assumption that the over-all cost as used in our Exhibit 28 would allow for present day pipe prices, and in that case [fol. 3356] the increase in pipe prices between January 1, 1933 and as of to-day amounts to \$16.2790 per 100 lineal feet, while the allowance for omissions and contingencies is \$6.8057 per 100 lineal feet. Now, in Mr. Freese's testimony the other day in regard to this 59 pound pipe, I am under the impression that he quoted an improper figure as to the present-day price of this pipe.

Q. You mean that he inadvertently quoted an improper

figure?

A. Yes, my recollection was that he quoted a figure of \$2.66, substantially, as the present-day price of this pipe. I don't know what the discrepancy was due to. So this figure which I have used, and which I have checked, will not agree with the citation which Mr. Freese gave in his own testimony. Now, analyzing a number of lines in that manner, I find on Line B 16-inch that the difference in pipe prices is a trifle over \$9.30 per 100 lineal feet, while the allowance for omissions and contingencies is a trifle over \$5.55 per 100 lineal feet.

[fol. 3357] A. If I had used the figure quoted by Mr. Freese I would have had a much greater divergence than I have shown here, because the figure quoted by him is, I believe, some 17-½ or 18 cents per foot in excess of the pipe which I have here. Taking a 12-inch line, 33.37 pounds—

Q. Per foot.

A. Per foot, Line GA, on which in Exhibit 28 our total installation costs, including contingencies, are estimated to be \$43.55 per 100 lineal feet; if we assume that our over-all cost per 100 lineal feet of \$170.8419 would include pipe prices as of to-day, and if we corrected our trenching costs to the unit figures adopted by Mr. Freese, we would have available for the construction of that line only \$32.6455 per 100 lineal feet, or a trifle over 32 cents per foot.

Q. Can 12-inch pipe be laid for that figure, Mr. Biddison?

A. It can not. On this particular pipe the difference [fol. 3358] — prices between January 1, 1934, and as of to-day, is—

Q. January 1, 1933?

A. 1933, and as of to-day, is per 100 lineal feet \$7.3759; whereas, the contingencies allowed for in Exhibit 28 on this line amount to \$4.1669 per 100 lineal feet. I have a number of other lines set up in the same manner. On Line O, 18-inch 53.223 pound pipe, the difference in pipe prices—

Q. As between January 1, 1933, and June 15, 1934?

A. Yes, is \$16.2790 per 100 lineal feet, while the allowance for omissions and contingencies on that line, as estimated in our Exhibit 28, is \$7.6589 per 100 lineal feet. In general, this per cent shows that the assumption that the unit prices per foot of pipe in place in Exhibit 28 would include prices as of to-day, wipes out our allowance for omissions and contingencies in general in a ratio of nearly two to one, and when you further consider the unit costs for trenching work proposed by Mr. Freese and apply them to the estimates in Exhibit 28, the resultant figures for installation cost are far below those for which pipe lines of this nature can be or have been installed in the last ten or twelve years.

Q. Mr. Biddison, what weighted cost per cubic yard was used in Defendant's Exhibit 28 for machine excavation? [fol. 3359] A. The weighted cost per cubic yard from Exhibit 28 for machine trenching is \$.4843 per cubic yard, or a little less than 49½ cents per cubic yard for machine

trenching.

- Q. Now, does all machine trenching cost the same, regardless of the size of the trench, Mr. Biddison?
  - A. It does not.
- Q. Is there a wide variance in cost as between the excavation on a trench for 4-inch pipe and the excavation on a trench for 18-inch pipe or 20-inch pipe?
  - A. Yes, there is.
  - Q. I mean per cubic yard.
  - A. Yes, there is.

Q. Now, what is that variation, and what is the reason for it?

A. The reason for it is that in machine trenching work you are limited to a top speed on the machine, in any event,

beyond which you can not go. If you have a trench of large area your machine will not travel at the top speed, but you will dig with it more cubic yards per day than you will when digging a small sized trench, and on the larger sized trenches your output per machine per day is greater than it is when you are digging smaller trenches.

Q. For what reason did you apply a varying cost per [fol. 3360] cubic yard of excavation, depending upon the size of the trench?

A. Yes, that is correct.

Q. In connection with your estimates as set forth in Defendant's Exhibit 28.

A. That is correct. I might cite some of those variations. On the A System for 18-inch pipe machine trenching is at as low as \$.407.

Q. Per cubic yard?

A. Per cubic yard.

[fols. 3361-3366] Q. Go ahead, Mr. Biddison.

A. While on Line A-1-4, three-inch line, it is \$.521 per cubic yard; on Line A, 18-inch, in Oklahoma, it is \$.40 per cubic yard; on Line A-D, 6-inch, it is \$.612 per cubic yard.

Q. So you have endeavored to make an individual application of costs to the specific size of trench to be excavated?

A. That is correct.

Q. Depending upon the width and depth of the trench?

A. That is correct; and that results in a different figure per cubic yard for trench excavation, for not quite every line, but nearly every line, and certainly a different figure for the average for trench excavation by machine on every system of lines.

[fol. 3367] Q. In your own experience as a construction engineer on natural gas pipe lines have you ever heard of natural gas pipe line construction or trench excavation being carried on in accordance with any such specifications as were outlined by Mr. Nichols?

A. I have not.

- Q. Mr. Biddison, have you examined Plaintiffs' Exhibit 6?
  - A. I have.
- Q. Have you noted that in Plaintiffs' Exhibit 6 Mr. Freese has allowed for general and undistributed costs a sum which approximates ten per cent of his direct structural costs of physical property?
  - A. Yes; I noted that.
- Q. Mr. Biddison, in any reproduction cost appraisal, other than that appraisal made by Mr. Freese or his firm, have you ever observed a failure to compute Taxes and Interest During Construction based upon a fixed or definite wholesale construction period or time within which the property would be reproduced or constructed?

A. No; and I don't see how an estimate of cost of reproduction, or an original estimate for construction of a property of any size, can be made and proper consideration given to those items without the predetermination of a fixed period for the construction of the property.

[fol. 3368] Q. What is the effect of the failure, as reflected by Plaintiffs' Exhibit 6, to assume a fixed period of time in which the property would be reproduced, in so far as the computation of taxes and interest during construction are concerned?

A. The effect of that failure is to practically eliminate taxes during construction which would be incurred during reproduction, and to reduce the estimate of interest during construction which would actually be incurred during the wholesale construction period to a figure far below what I think would actually be incurred.

Q. Mr. Biddison, have you participated as a consulting engineer in the construction of many hundreds or thousands of miles of transmission line equipment?

A. I have.

- Q. And other natural gas properties of practically every kind and description?
  - A. Yes.

Q. In connection with the major construction projects which have been constructed under your supervision, as a part of a wholesale construction program, what have been the actual overhead and general undistributed costs?

A. Well, in the case of Southern Natural Gas Corpora-

tion, they were in excess of 18 per cent.

Q. As contrasted with Mr. Freese's estimate of ap-[fol. 3369] proximately ten per cent as shown in Plaintiffs' Exhibit 6.

A. That is correct. On the Southern Gas & Fuel Company, which was a small job, those costs ran in excess of 20 per cent.

Q. What was the Southern Natural Gas projects, and

the Southern Gas & Fuel project?

A. The Southern Natural Gas project involved a transmission system from the Northern Louisiana fields across Mississippi and Alabama into Georgia. The Southern Gas & Fuel job embraced an 18-inch line from Baton Rouge to New Orleans, Louisiana.

Q. Were both of those major construction projects?

A. "They were.

- Q. And the actual historical general and undistributed overhead costs were in the per cent relation which you have mentioned?
  - A. That is correct.

Q. And the percentages which you mentioned are expressed in connection with the direct structural costs of the physical property?

A. Yes; the ercentages which I have stated are the percentages of direct structural costs, which were incurred as

general and undistributed costs.

- Q. Mr. Biddison, have you examined Plaintiffs' Exhibit 7, being an estimate of annual depreciation reserve ac[fol. 3370] cruals, as determined by Mr. S. W. Freese?
  - A. I have.
- Q. Have you noted that Mr. Ereese has used a 13-year figure for amortization of gathering lines?
  - A. Yes.
- Q. Is there any factual basis, in your judgment, for the adoption of a thirteen-year figure for the amortization of gathering lines?
- A. I don't know of any facts that would justify it, and I don't know where any such facts might possibly be obtained.
  - Q. Why do you make that statement, Mr. Biddison?

A. Well, I just never heard in all my experience of any relationship of gathering lines, or well lines, or gas wells, or any other such equipment to any such figure of life.

Q. Are there many factors which make for the removal, replacement and abandonment of gathering lines which

have nothing whatever to do with the deterioration of pipe?

A. That is correct; and further than that, even if the average life of pipe were known in any locality, that average life figure does not govern the rate of replacements.

[fol. 3371] Q. Why is that true, Mr. Biddison?

A. Because the thing that governs the rate of replacements due to physical deterioration is not so much the average life as it is the variations of the specific items from the average, and that can be demonstrated mathematically, and has been so done.

Q. And can you do it?

A. I can and have done so.

[fol. 3372] Q. Mr. Biddison, will you examine, please, page 11 of Plaintiff's Exhibit 7? Does that page purport to be a mortality table covering the life of steel pipe?

A. It does.

Q. Does it purport to show that the service life of steel pipe is thirty-three and a half years?

A. It so states.

Q. Now, Mr. Biddison, you have been in the natural gas business a great many years. From any information which you have been able to obtain or any data that you ever heard of, have you ever been able to determine that the average life of steel pipe is as long as thirty-three and a half years?

A. No, and nobody will be able to ascertain what the average life of steel pipe is in any locality for a great many years yet to come, because steel pipe has not been manufactured long enough for anybody to know in any specific

location what its average life is.

Q. Based upon all presently known data, do you believe that the average life of steel pipe is more or less than thirty-three and a half years?

[fol. 3373] A. Well, I don't believe it is more, and I don't believe it is less. I just don't believe there is any such relationship existing.

Q. Why do you make that statement, Mr. Biddison?

A. Because steel pipe has not been manufactured long enough so that in any particular locality its average life can have been determined. Q. You mean that steel pipe has not gone through a life cycle in any particular locality?

A. That is correct. The first piece of steel pipe that has

been made is not as old as I am.

- Q. Mr. Biddison, in connection with Plaintiffs' Exhibit 7, Mr. Freese made no provision in connection with his reserve accrual rates, as I interpret the exhibit, for any excess cost of replacements over original construction?
  - A. I can't find any such allowance in this exhibit.
- Q. If such is correct, and no allowance was made for excess cost of replacements over original construction, would the reserve accrual rate as determined by Mr. Freese and set forth in Plaintiffs' Exhibit 7 be inadequate or otherwise?
- A. If the reserve set forth by Mr. Freese was otherwise adequate, still, by virtue of the fact that there is no allow-[fol. 3374] ance to take care of the excess cost of replacements over original construction, it is still inadequate for that reason.
- Q. Is there an excess cost for the replacement of steel pipe joint by joint over the wholesale cost incurred on original construction?
  - A. Yes, a very substantial excess.

Q. And what is the reason for that excess cost of replace-

ments over the cost of original construction?

- A. Well, the amount of time of a crew required to make a small installation, their moving in and out, is one contributing factor to the excess cost. The excess time required in disconnecting and reconnecting the joints is another reason for it; the excess cost of ditching work over installed pipe is compared to ditching work before the pipe has been laid is another reason for it. Almost every operation in the making of a replacement takes more time and costs more money than it does in wholesale construction work.
- Q. As an example, Mr. Biddison, would it cost more to replace a joist or a sill in a house than it would to put that joist or sill in at the time of original construction?
- A. Certainly it would, and it would cost more money also to send a crew out to put in six joists than it would to have, a crew working there long enough to put in several hundred.
- Q. Mr. Biddison, are you generally familiar with the allocation of property as made by Mr. D. A. Huley in Defendant's Exhibit 46?

[fol. 3375] A. Generally so, yes, sir.

- Q. Do you have such familiarity as would enable you to testify as to whether the allocation he made is reasonable or otherwise?
  - A. Yes,

Q. Do you believe it to be reasonable?

A. I believe it to be reasonable, and I do not believe that any other basis of allocation would approach it in equity.

Q. In connection with your work, Mr. Biddison, have you had occasion to assist in negotiations for the financing of construction of natural gas projects, including natural gas pipe line enterprises similar in all essential respects to the business of Lone Star Gas Company?

A. I have, several times.

Q. Are you familiar with the rates of return and current yields of securities such as mortgage bonds of gas pipe line companies doing business in the United States?

A. Generally so. I have made no specific recent studies on it; I am generally familiar with what has been going on with reference to natural gas securities.

Q. Is the natural gas business considered speculative and

hazardous or not?

A. It is, as compared to other utility enterprises.

[fol. 3376] Q. Mr. Biddison, based upon your experience, what minimum net annual rate of return do you believe the Lone Star Gas Company is entitled to receive on the fair value of its public service property?

A. Ten per cent net after depreciation accruals.

Q. And as you use the term "depreciation", is that inclusive of depletion as well as amortization?

A. It is. I refer to the general accrual fund commonly

styled depreciation accrual fund.

Q. And is that ten per cent net after all other operating expenses have been properly provided for?

A. It is.

### Cross-examination.

## Questions by Mr. Fitzhugh:

Q. And before payment of Federal income taxes, or after payment?

[fol. 3377] A. After payment of Federal income taxes, ten per cent net.

- Q. That is the very minimum, isn't it?
- A. Yes, I think so.

Q. What is your maximum?

- A. Well, my maximum, I would say, would be twelve and a half to fifteen per cent.
  - Q. Twelve and a half to fifteen per cent?

A. Yes, sir.

- Q. Didn't you testify in the Laredo rate case here a while back that it ought to be twenty per cent for any public utility as a maximum?
  - A. No.
- Q. You set a minimum of ten and a maximum of twenty, did you not, in that case?

A. I think no. I did state a minimum of ten net.

- Q. Now you say a maximum of twelve and a half to fifteen?
  - A. Yes, sir.

Q. Did you make up your mind on it?

- A. I made up my mind twelve and a half to fifteen.
- Q. Fifteen would be your maximum, then?
- A. That was the highest.
- Q. I thought it was one of those "and/or" propositions.
- A. No.
- Q. Now, Mr. Biddison, when you first started out you were talking about pipe prices, and you read, if I under-[fol. 3378] stood you correctly, what the net figures would be, taking into consideration the rises in pipe prices on certain lines; is that what you did?
  - A. No.

Q. For certain sizes?

- A. Not if I understood your question correctly. I read into the record what would be left available for construction costs if we assume that the installed price per hundred lineal feet which has been used in Exhibit 28 were assumed to include present day prices of pipe—to allow present day prices of pipe.
  - Q. And you singled out certain sizes, did you not?
  - A. Yes, sir.
- Q. Now, have you calculated what would be the difference as applied to all the property included—I am talking about pipe now—in the Plaintiffs' Exhibit No. 6?
- A. No; I have had no opportunity to do it. That is too long a job for the time that has been available.

- Q. Well, what is the omissions and contingencies applied to all the property included in and covered by Plaintiffs' Exhibit No. 6?
  - A. I don't know.

Q. As allowed by yourself?

A. I don't know. I made no determination of it.

Q. For the same property. You could not tell that?

A. I have made no determination of it.

[fol. 3379] Q. So you don't know whether the omissions and contingencies would cover the rise in pipe prices or not, do you, as applied to Plaintiffs' Exhibit No. 6?

A. Well, I have a whole page of lines which I picked out, and it does not approach doing it on any of the lines I

picked out.

Q. Well, you didn't take the whole exhibit?

A. No, but I have taken pipe from four and a half inch

up to 18 inch.

Q. Now, what was the rise in pipe prices, the total amount, covered by that item and applied to your Exhibit 28, which includes the whole property?

A. Well, I don't know offhand. I believe Mr. Steinberger

testified to that point.

Q. Do you know what the approximate figure was?

- A. No; I have forgotten it now. His exhibit would show.
- Q. Do you have Mr. Steinberger's exhibit before you now?

A. Yes.

Q. Can you tell from that what the amount for the rise in pipe prices would be?

A. This is not the exhibit that shows that difference.

Q. Well, in round figures, I think he testified that the difference in pipe prices would be about a million two hundred thousand dollars at one time, and deducting a decrease in pipe prices of about three hundred thousand dollars would leave net around nine hundred thousand. Did you actually check it in any way?

[fol. 3380] A. I could if I could get his testimony or his exhibit. I don't remember which exhibit it was that he had

nor what page it was. I don't have it now.

Q. Well, can you tell what the contingencies would be in your whole appraisal?

A. I have made no computation of that in the whole appraisal.

Q. Well, now, without knowing any of those things, Mr. Biddison, how in the world could you say that the item of

omissions and contingencies applied over all to Mr. Freese's Exhibit 6 would not equal any change in pipe prices?

A. Just by the method I have exemplified in citing these lines.

Q. Picking out a few lines?

A. Yes, precisely—not a few, but a large number.

Q. Now, there has been some testimony from various witnesses about bell holes in connection with the excavation and laying of pipe lines. Are the bell holes ever dug on twelve inch or smaller pipe?

A. Yes, certainly.

Q. Can't pipe of this size be tied in on the top of the ditch before the pipe is dropped into the ditch just as well as it could if the pipe were already settled in the ditch and the tie-in made?

A. When you are laying dresser coupled pipe that is the way you always do it, and when you are laying welded pipe [fol. 3381] that is the way you apply it, but you have some that have to be made down in the hole. I think probably you have a misunderstanding of the bell holes here in connection with dresser coupled pipe. I will read the specifications from a contract for laying dresser coupled pipe, which will exemplify it.

[fol. 3382] Q. Well, I don't care about any contract. I want to know how it is done.

A. Well, it is done after the pipe is over the ditch, by a man getting down in the ditch and shoveling out sufficient dirt so that the dresser coupler may set down in the hole and the pipe rest on the bottom of the ditch and so that the pipe will be supported by itself, instead of being supported by the dresser coupler.

Q. Now, you are talking about dresser coupled pipe, aren't you?

A. Yes.

.Q. Now, the original question was as to welded lines.

A. You didn't so state.

Q. Then I intended to do so. How often do you have a bell hole for welds, on a twelve inch welded pipe line, for tying in?

A. On an average of about every 100 feet.

Q. Is it your testimony that those tying in welds can not be made on the top of the ditch before the pipe is dropped into the ditch?

A. No, you could block that pipe up high enough so that you could make the welds at the tie-ins without digging the bell holes, but that is not the actual practice, and would not be economical. In actual practice, you actually cut out bell holes where the tie-ins come.

Q. On small pipe, such as three inch, four inch and six inch pipe, don't you always have the pipe up on skids, and aren't the-welds made on the pipe right up on the skids? [fol. 3383] A. Yes, and also on larger size pipe, right on up the line, but there is a necessity for the bell holes at the tie-ins, so that a man can work around that pipe in making the welds.

Q. If the tie-in is made up on the skid before the pipe is dropped into the ditch, how could there ever be any necessity for a bell hole?

A. So that a man could have clearance around that pipe

to work, and they do dig them in practice.

Q. You mean while he is making the weld on the pipe, up on the skids?

A. Yes.

Q. And that is your testimony?

A. Absolutely, and that testimony is based on having supervised a lot of that very kind of work.

Q. Well now, if you are correct in that, Mr. Biddisonor, how high is this pipe on the skids?

A. Well, those skids are ordinarily four by fours, and on big pipe they may be four by sixes.

Q. How high up from the ditch are the skids?

A. The skids lay right on the ground.

Q. Right along the top of the ditch, is that correct?

A. Yes.

Q. Now, if you are correct about that, all that would have to be done to allow a man to work around that pipe which is laying up along even with the top of the ditch would be to knock off about a foot of the ditch to give him all the [fol. 3384] room he would need to work around the pipe; isn't that right?

A. About a foot of the ditch is about right, yes.

Q. Well now, that is not really a bell hole, is it?

A. It is called a bell hole, yes.

Q. That is not a bell hole in the sense that you use one where you have dresser coupled pipe?

A. No, sir.

Q. Where the bell hole goes clear down the whole depth of the ditch?

A. No, in the case of the dresser coupled pipe, it is a hole dug in the bottom of the ditch only, and you don't shave off the sides of the ditch.

- Q. What gang is used for the digging of those bell holes?
  - A. A crew for the digging of the bell holes.
  - Q. You have a separate gang for that work?
- A. Yes, generally.
- Q. And if they are working in connection with dresser coupled pipe, they work in connection with the laying gang?
  - A. Yes.
  - Q. And right along with them?
- A. Yes, when they are working in connection with the welding gang in a welded line, they work with the welding gang, or the laying gang, and if it is in connection with dresser coupled pipe it is in connection with the laying gang.
  - Q. Is pipe ordinarily strung along ahead of the ditcher
- or behind the ditcher?
  [fol. 3385] A. It depends upon the class of pipe you are laying.
  - Q. In the case of a welded line?
- A. In the case of welded lines, it is usually strung ahead of the ditcher.
  - Q. How about in the case of the dresser coupled line?
- A. In the case of a dresser coupled line, it may be done either way, so far as the stringing is concerned.
  - Q. Now, why the difference?
- A. In the case of welded lines, it is advantageous to have your welding done ahead of the ditching. There is more room to work in and your right of way is not obstructed by open trench.
- Q. And in the case of the dresser coupled lines, it doesn't make any difference?
  - A. It does not make so much difference; in the case of dresser coupled lines, it is of course advantageous to have your pipe on hand, and know it will be there when you get your ditch dug, and therefore it may be strung ahead of the ditching machine. It is not, however, ordinarily laid ahead of the ditching machine.
  - Q. Now, when you say you never heard of any excavation specifications of the sort given by Mr. Nichols to these

excavation contractors, do you mean to say that there is no such a thing as contracting with contractors for work of this sort?

A. No, I don't mean that at all.

Q. Then you do sometimes contract that work, do you not?

A. Well, I assume some of it has been contracted as a [fol. 3386] separate contract, but I never knew of it being done.

Q. Now, what sort of specifications do you give when you contract work of that sort? You have a contract there, don't you, Mr. Biddison?

A. Yes, right here.

Q. And it has some specifications for excavation in it, does it not?

A. Yes. ·

Q. Will you read those?

A. Yes. "Ditches shall be machine dug whenever possible and economical so to dig. The trench shall be excavated to a width not less than seven (7) inches wider than the outside diameter of the pipe.

"Except where special conditions as described below are encountered, the depth of ditch shall be thirty (30) inches greater than the diameter of the pipe. This shall be the normal depth and shall be the minimum for all parts of the work except that where the entire ditch is in rock or the material is unusually heavy and not subject to softening by water, the engineers may permit and approve a depth not less than 24 inches greater than the diameter of the pipe but in such cases, the engineers' approval must be obtained before completing the ditch. Where the soil is soft, the engineers may require a depth of ditch of 66 inches and in special cases, such as through the shoulders of the banks in the approaches to streams, when single line is laid, the engineers may require the depth of the ditch to [fol. 3387], be 96 inches. No adjustment of compensation will be made on account of the changes in the depth described herein. When the depth of the ditch is more than 96 inches, additional compensation will be paid the contractor for the extra work as herein provided, but contractor shall, before beginning the extra work, obtain a written order from the engineers covering each case where extra depth is authorized.

"Ditch shall be carefully graded by hand wherever considered necessary by the engineers. All pipe shall rest on the bottom of the ditch. Bell holes shall be dug for all couplings so that the pipe weight will not be carried on the couplings except that in locations to be determined by the engineers, sufficient crumbs of dirt may be left in the bottom of the ditch to form a bed for the pipe in which case the depth of the ditch will be measured to loose earth in bottom of ditch and not to actual ditch bottom and in which case, bell holes will not be required."

• • "In all rock excavation, couplings shall be bell holed or sufficient crumbs of earth be left in the bottom of the ditch to provide a uniform bed for the pipe.

"All curves or bends in ditching shall be made easy so as not to require firebending of pipe except where special conditions make sharp bends necessary and unavoidable." [fol. 3388] Now, that is a ditching clause from a contract embracing the complete operation of unloading, hauling, stringing, ditching, laying, painting, backfilling and cleaning up right of way.

Q. All right, then.

A. And that is the usual form in which ditching contracts will be found in connection with the other operations for laying of pipe.

Q. Now those specifications in general show the depth of trench, the condition that the ditch is to be delivered in and the width of the trench and provisions as to what the contractor's obligation is in different kinds of soil conditions; is that right?

A. They do.

Q. Now, isn't that just about what Mr. Nichols did in his specifications? He specifies the trench size, the kind of ditches to be delivered, and the obligations of the contractor in digging it, didn't he?

A. He did those things, but there are certain other essential elements that are mentioned in here which he did not include, and there is an essential difference in the requisite form of contract for submission as a separate ditching contract from that required for the ditching specifications in an over-all contract, and those differences were not allowed for in the specifications delivered or submitted in this

hearing as having been given to the ditching contractors by Mr. Freese.

# [fol. 3389] Mr. Fitzhugh:

Q. Of course you don't mean to say, Mr. Biddison, that specifications are not different, and are not differently handled in each contract?

[fol. 3390] A. Do you mean as between these two con-

tracts here to which I referred?

Q. No, but as between any contracts for excavation work?

A. No, that may be true. 'I don't suppose any two engineers would draw them entirely alike, but there are certain fundamental things to be provided for in the specifications, which if not provided for, will affect the bid price.

Q. Now, you testified it was your understanding that Mr. Freese had allowed, as his general overheads, ten per cent

of the direct structural cost?

A. No, but that what he allowed had amounted to about that much.

Q. How did you make that calculation?

A. If, on page 2, you deduct from the total amount of \$40,256,862.39, the \$5,407,711.99 which he calls non-physical properties, you will have left something less than Thirty-five Million Dollars. Then, if you take the sum of his administrative and legal expenses during construction, engineering and supervision during construction, taxes during construction and interest during construction, constituting the general undistributed overheads, you have, if I have added them up correctly here this time, about \$3,900,000.00, which is a little over ten percent.

Mr. Griffith: Of the direct structural costs?

A. Yes, of the direct structural costs.

Q. Well, you forgot to put in the preliminary and organization expense, did you not?

A. No sir, I did not forget to put it in. I left it out

[fol. 3391] deliberately.

Q. Did you add them in?

A. No, I did not.

Q. Well, that is one of the overheads, isn't it?

A. It may be classed as an undistributed overhead. It can be, yes, which would add some \$194,000.00 to what I set

up here, and change the percentage a trifle. The amount allowed is trivial.

Q. Now, what percentage is that—it is not ten percent, is it? It's approximately 12 per cent, is it not?

A. It would be about 11.8 percent, as close as I can read it.

Q. All right. Now then, turn to page 38 of the Exhibit introduced by Mr. Freese, which is Plaintiffs' Exhibit No. 6. On that page, the interest during construction is shown in the total amount of \$1,522,468.89, is it not?

A. What page did you say?

[fol. 3392] Q. Page 38 of Exhibit 6.

A. It is \$1,522,468.89.

Q. Now, what was the construction period that Mr. Freese assumed for the building of the compressor stations, and for the properties thereunder for the purpose of calculating his interest during construction?

A. I don't know whether he assumed any or not; there

is nothing on here to show.

Q. What is your answer-you don't know the period?

A: I don't know.

Q. What did Mr. Freese assume for the transmission system line equipment—the transmission line equipment?

A. So far as I have been able to ascertain, he didn't assume any.

[fel: 3393] Q. So you don't know how he got this \$1,522,-468.89, the total he shows for interest during construction, do you?

A. Only as shown on page 38, by the application of the

percentages there listed.

Q. And you didn't read his testimony as it appears in the record, in connection with this page, did you?

A. No; I heard a great deal of it.

Mr. Griffith: And you still don't understand it?

A. I still don't understand any definite construction

period for any of these items or for all of them.

Q. Now, then, you testified, Mr. Biddison, that on the Southern Natural Gas line that the overheads amounted to 18 per cent. How long a line was that?

A. That involved the construction of about—over 1600°

miles of transmission system lines.

Q. What was the total cost?

A. Something in excess of thirty-six million dollars.

Q. How much were the overheads?

A. I don't know; they were in excess of 18 per cent of the direct structural costs.

Q. Do you know what the overheads included?

A. Yes.

[fol. 3394] Q. What? Name the items that were included in the overheads, and the amounts for each.

A. I can not name the amounts; I do not have a breakdown of it. I have seen an analysis of those accounts, and know what that ratio was. Those percentages include engineering and supervision during construction, administration and legal expenses during construction, taxes during construction, interest during construction, and preliminary and organization expense.

Q. You don't know how much taxes during construction,

do you?

A. No, but I know they paid taxes during construction.

Q. Well, how do you know they did?

A. Well, because I saw the vouchers drawn for which by which payment was made, and because I helped compute the taxes that would have to be paid.

Q. All right What was the amount shown on the vou-

chers?

A. I don't know; I have no breakdown on that, as I have stated.

Q. How much of the 18 per cent was for the cost of financing?

A. I don't know; I don't have a breakdown on that. I don't know what that ratio was.

Q. Was the money raised by the sale of bonds?

[fol. 3395] A. Partially so. .

Q. You don't know the discount on the bonds at the time they were sold?

A. No, I don't; and that is not a part of that cost of

financing.

Q. Well, the sale of the bonds would be a part of the

financing, wouldn't it?

A. It would be expense. The out-of-pocket expense in connection with the sale of bonds would be; the discount on the bonds would not be.

Q. And you don't know that amount?

A. I do not.

Q. Now, another one you mentioned was the Southern Gas & Fuel?

A. Yes, sir.

Q. How much line was constructed in this piece of work?

A. About 90 miles of 18-inch.

- Q. The cost of financing on this construction work was considerable, was it not?
- A. No, the cost of financing on that was not very large; that was a comparatively small item on that one, because that particular concern was owned by a large holding company, which was in position to handle the financing of such matters right promptly on the decision to do the work.

Q. Now, you say the general overheads on this were 20

[fol. 3396] per cent.

- Q. Can you tell the items that make that up and the amounts for each?
- A. No, not the amounts for each. All I can tell you is that ratio; that is all I try to remember on a lot of those things.

Q. How much did the total job cost!

- A. The total job was something in excess of three million dollars.
- Q. Do you know what all was included in the general overheads?
- A. Engineering and supervision during construction, administration and legal expenses during construction—
- Q. Oh, I don't mean just those general classifications, Mr. Biddison; I mean specifically what was included in the engineering during construction and the administration during construction, and all that. You don't know the detail of that, do you?

A. Not now; but I supervised the construction of the job, and passed on all the details while it was being built, and

approved the vouchers for payment for it.

Q. You can't break down this 20 per cent by amounts, so we can check up on it, in any way, can you?

A. No; no, I have stated that.

Q. Now, then, what is the expected life of the present [fol. 3397] field lines of the Company?

A. I don't know.

Q. Do you have any idea at all?

A. No, I made no investigation along that line at all, and couldn't hazard a guess on it.

Q. Now, the only-thing that you can say about the assumption of the thirteen-year life as used in Mr. Freese's Exhibit No. 7 is that it is wrong—isn't that right?

A. No, I can't say much more than that, and I don't think I said that. I did say that I knew of nothing on which to predicate an assumption of any such figure.

Q. Well, you don't know even how Mr. Freese got his

thirteen years, do you?

A. No.

Q. How are you able to say it is wrong, without even knowing how he got the figure?

A. Even if the figure were right, the use of it in that manner does not determine the amount necessary to be set aside for replacements on such an average life.

Q. You say the figure which Mr. Freese used would amortize the total amount of the field lines in 13 years,

would it not?

A. At the interest rate he set up, I think it would do that; and that is all it would do.

Q. All right; and if he average life is correct, it would [fol. 3398] provide for the total refunding of the whole investment to the owners of the business in that time, wouldn't it?

A. No, sir, the amortization of the value of a piece of property of thirteen years' life in thirteen years will not return to them the value of the property, unless every individual item of property in that group lives to the full age and full term.

Q. Turn to page 2 of Exhibit No. 7—Plaintiffs' Exhibit No. 7—that is where this 13-year life appears as applied to gathering system rights of way, field measuring station structures, and field measuring station equipment. Don't you see on that page, Mr. Biddison, that in addition to the amortization fund on the field line equipment that per cents from .02 to 1.14 in the 13 years were provided for replacements? Do you see that?

A. Why, I see that it is estimated that the replacements would be at those rates, but I don't see that that is making a provision for replacements. That is merely stating what those replacements amount to, and that is a deduction from

the accrual rate.

Q. You didn't know, then, Mr. Biddison, and it is news to you right now for the first time that those are an addition to the amortization rates?

[fol. 3399] A. Well, on the first year there that .02 is deducted from the 5.085, giving the 5.065 in the right-hand column.

Q. Can't you see by looking on this page that the amortization fund is plus the replacement rate of .02, because the annual rate of 5.085, which was used by Mr. Freese—

A. Maybe I have taken it backwards there.

Q. All right. Now, you have made the statement, have you not, Mr. Biddison, that the cost of replacement is in excess of the cost of—of the original cost?

A. Yes.

- Q. Suppose you have rock excavation at the original installation, Mr. Biddison,—would it be necessary to excavate rock again to make a replacement in the line at that point?
  - A. I expect it would. Maybe not in the same amount.

    Q. The rock just sort of grows back by years, doesn't

it?

A. I have never noticed it doing that.

Q. Well, why would you have any rock excavation for a replacement, then?

A. Because you are going to have to have a large area to work in for the replacement, and you have to dig out more than you originally dug, in making the replacement.

[fol. 3400] Q. All right; in making a replacement of a piece of pipe, where the line as originally laid was through rock excavation, how large a trench would you have to have excavated to make the replacement?

A. Well, you are going to have two bell holes—two bell holes are going to be dug out, and those bell holes will probably have to be eighteen inches below the bottom of the coupler, in order to provide room to connect up. There is that much rock to be taken out, anyway.

Q. Now, some of these replacements you are talking about and classifying as replacements, are as much as ten and fifteen mile stretches, are they not?

A. Some of them might well be that, yes.

Q. Now, in the case of a sizable replacement of that sort, how have you figured in the salvage value of the pipe taken out?

A. I haven't made any figures on the salvage value of the pipe.

Q. Do you know what the salvage value of the pipe as

taken out is?

A. Why, it might be anything from nothing on up to twenty-five, maybe thirty, per cent.

[fol. 3401] Q. In Mr. Connor's Exhibit, page 153, this statement occurs: "It has been impossible from an analysis of records to determine the net value of salvable material involved in the replacement, removal, or abandonment of the Main Lines and Tap Lines of Lone Star Gas Company." Do you subscribe to that?

A. I don't know anything about it. I did not make any such analysis. I don't know whether it is possible to deter-

mine it or not.

Q. You would have to know what the worth of the pipe taken out is—what the salvage value is—before you can find out what the cost of replacement is, wouldn't you?

A. To get the net difference you would have to know that.

Q. That is what you are trying to find?

A. I am not trying to find it. .

Q. The difference in cost of the pipe that is being used for replacement as compared with the original construction; isn't that what we are talking about?

A. No; the statement I made was that the cost of replacements of such work ordinarily done piecemeal was greatly

in excess of the cost of original installation.

Q. And if you are making that statement as you now make it, you are not considering in any way the salvage [fol. 3402] value of the pipe taken out?

A. No; because that is not a part of the replacement. That has necessarily to be considered in the adjustment of the property account when the adjustment is made, but it is not a part of the cost of replacement.

Q. Would it be considered in any way in the determina-

tion of the annual depreciation rate?

A. Yes.

[fol. 3403] ED C. CONNOR, a witness for Defendant, resumed his testimony, and testified as follows:

Cross-examination.

### Questions by Mr. Fitzhugh:

- Q. Refer to your Exhibit No. 49, Mr. Connor, table 2. The heading on this page is Main and Tap Lines, calculation of major removals, based upon plaintiffs' Exhibit 7, page 4. Do you have with you Plaintiffs' Exhibit 7?
  - A. I have.
- Q. Turn to page 4 of that exhibit. By comparing page 4 of Plaintiffs' Exhibit 7 with your table 2, Defendant's Exhibit No. 49, will you show how you reasoned from page 4 of Plaintiffs' Exhibit 7 to get any of the figures shown on your exhibit?
- A. Why certainly. Mr. Freese, in his Exhibit 7, page 4, column 4, sets out the annual accrual to provide for major removal of pipe in service, which is .289 per annum.
  - Q. What was that percentage to be applied to?
- A. It was to be applied to the pipe in service, by years, and it is the only way it could be applied. You could not apply it to pipe which had never been put into service in the system of the company.
- [fol. 3404] Q. Pipe in service when, Mr. Connor?
- A. I applied it to the pipe in service as it went into service, from the beginning of the company's operations.
  - Q. Why did you do that?
- A. Because that is the way it would have to be accrued, and that is the way it shows on page 4, from the year 1, forward.
- Q. Do you mean to say that is Mr. Freese's testimony on that exhibit?
- A. I don't know what his testimony is, but that is what the exhibit shows.
- Q. That is just your interpretation of what you think Mr. Freese's testimony was, isn't it?
- A. This exhibit shows that he sets up annually .289 per cent to provide for major removals.
- Q. Don't you know, Mr. Connor, that that percentage of .289 was to be applied to the present pipe in the system?
- A. Yes, as of this date, but not in the year 1912, because the pipe that is in the system today was not in the system

in 1910, 1911 and 1912. You could not start out in 1910 and apply .289 per cent to 4,000 miles of transmission system, when there wasn't but 250 miles of it in service.

Q. Do you know how Mr. Freese found this .289?

A. Yes; I know exactly. Q. How did he find it?

A. He found it by dividing the total number of feet in service as of this date by the number of feet of pipe that [fol. 3405] had been replaced, removed or abandoned and classified as major removals. That is correct.

Q. Is that all he did?

A. That is the way he determined it.

Q. Didn't he divide that amount by the number of years?

A. Yes, and he assumed, when he did that, that every foot of pipe in service as of this date had been in service all along, and that is not correct.

Q. Notwithstanding that, this figure of .289 per cent

represents an average, does it not?

A. Yes and if, according to Mr. Freese's tabulation on page 4, that percentage would be applied to the footage of pipe in service for each year from the beginning of the company's operations, and that is exactly what I have shown on table 2 of Exhibit 49.

Q. Didn't Mr. Freese's method, the way he worked it out, show that there should be allowed, from the very year that the company started in business, replacements

amounting to on the average of 30 miles per year?

A. I don't think so. I don't think Exhibit 7 makes or sets out any such thing. It shows that in the first year of the company's operations, you would set up a reserve accrual of .289 per cent. Now, what could that be applied to in the first year of the company's operations, except the pipe which was in service during the first year of the company's operations?

Q. You understand that the computations on page 4 of [fol. 3406] Plaintiffs' Exhibit 7 do not apply to the first

year of the company's operations?

A. Why, it so states right on the exhibit.

Q. Where does it?

A. It says, Year One.

Q. That doesn't mean 1909, or the first year of the company's operations, does it?

A. Mr. Freese testified, if I recall his testimony cor-

rectly, that these percentages, if applied to the operations of the company from the beginning of operations, would have provided all the necessary replacements, removals and abandonments from the very beginning of the company's operations, and in that connection, assuming that every calculation on page 4 of Mr. Freese's Exhibit 7 is correct, and this exhibit of mine more or less indicates that they might not be correct, but assuming that every calculation on that page is correct, still these calculations of mine, in my opinion, do not meet the chief error which lies in this method of reserve accrual calculation.

Q. Just to sum up the whole thing, Mr. Connor, you don't have any idea what Mr. Freese did, do you?

A. I know exactly what Mr. Freese did.

[fol. 3407] Q. On page 4, Mr. Freese shows the annual rate for replacements and amortization, in per cent, as used by him, to be 1.70, does he not, Mr. Connor?

A. That is correct. 1.70 per cent, which included .47 for

amortization and 1.23 for replacements.

Q. Now, that 1.70 per cent was not to take care of any

major removals, was it?

A. No sir, it was designed to provide, assuming that this property was brand new as of this date—it was designed to provide a fund to amortize the property and make replacements in the property upon the assumption that the property as of the date of this inquiry was brand new.

Q. Mr. Freese's testimony on this point was as follows,

reading from the record, page 3023:

"To this annual amount of 1.70 percentage sufficient to both make replacements and amortize 100 per cent the cost of the property during its life time, we have added a percentage of .289 per cent to make major removals, and .150 [fol. 3408] per cent to make major rehabilitations, giving a total of 2.139 per cent per annum. There is very little regularity about the way these major removals take place. The heavy removals were in the earlier history of the company when there was a comparatively small amount of pipe in the system. However, the total of major removals during the history of the company, up through 1931, was 659 miles of three inch equivalent pipe."

A. That was in the main lines only.

Q. Mr. Freese further says: "Now, the percentage relation of those major removals to the total amount of pipe in the system as of December 31, 1931, was 8.54 per cent, and the ratio would be substantially the same today."

Now, where Mr. Freese says the total amount of pipe in the system as of December 31, 1931, what does that ap-

ply to?

A. It applies to the total amount of pipe in the system today; there is no question about that. I knew just exactly what Mr. Freese did, and there was no need for you to read that testimony back to me. What Mr. Freese has done, is to set out, on page 4, a series cumulative of annual replacement rates which he applies to the property of the Lone Star Gas Company in the Year One. Now, for those rates to have any practical application from the standpoint of Mr. Freese's own exhibit, they would have to apply to the pipe successively put into this system from the year one. Otherwise, he would be assuming that at the very beginning of the operations of this company, every foot of [fol. 3409] pipe in the system today was then in existence which was not true. He also pre-supposes however, clearly on column 2 of page 4, that you will start at the very beginning of this property when it is one year old, because his replacement rate which he shows in column 2 is taken from the replacement rate which he calculates would be made on pipe one year old.

Q. Well, just to show that you did not understand what Mr. Freese was doing and that you did not apply what Mr. Freese has done in his Exhibit 7, page 4, you ended up with 320.83 miles in your calculations as against his 659 miles of

removals?

A. Yes, and that is exactly the number of miles which would have been provided for during the history of this company, had you applied the percentage that Mr. Freese shows in column 4, page 4, to the property which was in service each successive year from 1910 and the twenty-two years succeeding.

Q. You mean if they had applied your percentage, in-

stead of Mr. Freese's percentage?

A. No, sir; I mean if they had applied Mr. Freese's per-

centage.

Q. Now, you carried your computations from table 2 over into your table 5, didn't you?

A. No, sir; table 5 has nothing to do with table 2.

Q. You mean you didn't intend for it to; is that it?

A. Why, no; I didn't. Table 5—you are referring to my table 2, aren't you?

Q. Yes.

A. Table 5 refers specifically to the table set up on page [fol. 3410] 6 of Plaintiffs' Exhibit 7, which has to do with gathering lines, and my Table 2 has to do with replacements and removals of main lines and tap lines.

Q. Well, in your column E on table 5, didn't you make the same interpretation of major removals as you did on

table 2?

- A. No, sir. I made the same application of it, yes, because Mr. Freese shows on page 6 of Exhibit 7, in Column 3, that 2.77 per cent, accrued annually against the gathering lines of Lone Star Gas Company, would provide for all of the replacements which would be required in the gathering lines of Lone Star Gas Company, together with the major removals of the gathering lines, and in addition thereto would accrue a credit balance of 77 per cent at the end of twenty years. I applied that per cent that he said would do that, to the gathering lines of the Lone Star Gas Company as they were actually laid, by years, from the year 1913, through 1932, and instead of accruing a credit balance of 77 per cent, we have a negative figure in that credit balance.
- Q. All right, now on page 1 you take the figure of 320.83 from table 2, and use that in your computations on page 1, did you not?

A. Yes, and very properly so.

Q. Instead of the 659 miles that Mr. Freese actually used?

A. Yes, but you never would have accrued 659 miles, or whatever that figure is, if you had applied that rate from the beginning of Lone Star Gas Company's operations.

[fol. 3411] Q. That is your interpretation of it.

A. That is the only interpretation that can be placed on

it, as shown by the exhibit itself.

Q. Now, on table 1, the total pipe mortalities from physical causes as shown on this page, in your Column C, are 337.75 miles of three inch equivalent.

A. That is correct.

Q. Is that right?

A. Yes.

Q. Now, from the beginning of the company's operations and covering the lines shown in the A column, what were

the total mortalities of pipe, actually?

A. I can not tell you that, Mr. Fitzhugh, the exact from Column A, because Column A is adjusted, as is set out in the exhibit, and other items of property or other lines are included in subsequent calculations. Including the lines which are provided for in table 3 and table 4, the total mor-[fol. 3412] talities to date, that is, of July 1, 1933, were 6,066,627 feet of equivalent three inch diameter pipe.

Q. Is that a figure of the actual total mortalities on ac-

count of physical causes only?

A. No, it is not.

Q. What is it for physical causes only?

A. 2,003,486 feet of equivalent three inch diameter pipe.

- Q. Now, from the curve which you used for mortalities in your own exhibit, what were the corresponding mortalities, that would compare with this 337.75 miles of three inchequivalent?
  - A. I have expressed it in three inch equivalent diameter pipe, in feet, Mr. Fitzhugh, and if it will be perfectly satisfactory to you, I will confine my answers to feet, because all my calculations are made on that basis. The actual replacements and abandonments due to physical causes, of main lines and tap lines, according to the records of the company, were 2,003,846 feet. My calculated replacements and abandonments covering the same period of time were 2,044,522 feet. That is assuming that the replacements were made in accordance with the renewal rates which I have set out in Exhibit 42.
- Q. That covers the same period as shown on table 1, doesn't it?
- A. No, it does not. I confined the tables in this Exhibit 49 to the period of time shown in Plaintiffs' Exhibit 7, page 12.
- Q. Well, at any rate, for this same period of years, these twenty-two years, your mortality curve would show a less number of replacements than Mr. Freese's curve, would it not?
- A. I don't know. I wouldn't be surprised but what it [fol. 3413] would, because the characteristics of the curves

are different during the early years of the pipe life, and the chief difference between the curve which I have used, and that which Mr. Freese has used, is its behavior in the future. There was no reason in the world why Mr. Freese could not have made that calculation to make it come out exactly.

Q. Well, the way you have computed Table Number 1, Mr. Connor, wouldn't it be more nearly applicable to your

curve than to Mr. Freese's mortality curve?

A. No. I think Mr. Freese made exactly the same sort of calculation when he tested the results of his own curve.

That is just a practical way of doing it.

Q. Well, if you show on table 1 a less number of mortalities than Mr. Freese shows, wouldn't that show that it would come closer to applying to your mortality curve than to his?

A. Well, it might show a lesser number there because I am quite sure Mr. Freese in making these applications did not break this footage of pipe down into the three groups which I have done. To the 337.75 miles of three inch equivalent diameter pipe there must be added 19.48 miles of three inch equivalent shown in table 3 and 7.41 miles of three inch equivalent shown on table 4. In other words, the calculations on table 1 are not the entire amount which I ascribe to Mr. Freese's calculations.

[fol. 3414] Q. Well, I will ask you this, Mr. Connor,—for this same period of time covering the same property, isn't Mr. Freese's mortality curve more liberal to the Company

than yours?

A. I don't know. I wouldn't be surprised but what they are very much alike up to that point; now, that is net results.

Q. You couldn't answer one way or the other on that?

A. No. I imagine they are very close together. In that connection, however, I think the critical test in this instance is what may happen in the future.

Q. Do you have Plaintiffs' Exhibit No. 6 there, Mr.

Connor?

A. Exhibit 69

Q. Yes, sir.

A. No, sir, I haven't, Mr. Fitzhugh.

Q. Well, you know the total amount that Mr. Freese al-

lowed for interest during construction, do you not?

A. No, sir, not offhand. (Copy of exhibit is here handed to witness by counsel for Defendant.) I have the figure

before me now, Mr. Fitzhugh.

Q. The figure is \$1,522,468.89, is it not?

A. That is correct, yes, sir.

Q. Now, you testified at length to what Mr. Freese did in computing his interest during construction. Can you tell me, Mr. Connor, what the period used by Mr. Freese for the construction of the general office building was?

A. I don't think that I testified at length to the construction period used by Mr. Freese, because I don't think he used

any construction period.

[fol. 3415] Q. Well, do you know — the period of time used by Mr. Freese for the construction of the Dallas office building was?

A. No, I don't know the individual times, Mr. Fitzhugh. I think I understand the method that he used.

Q. Do'you know what period of time he used for transmission line equipment?

A. No, sir, I don't on the individual lines.

Q. Do you know what period of time he used for the construction of compressor stations?

A. No, but I imagine he sets it out somewhere in the exhibit.

Q. Well, do you know for any of the items of property the period of time that Mr. Freese used?

A. No, I don't.

Q. Now, Mr. Freese, when he testified, testified at length. Did you read the record on that or hear his testimony?

A. Oh, yes, I heard his testimony.

Q. Now, without knowing what periods of time he used on any of the classifications of property, you are still willing to say that his figure is wrong?

A. Yes, sir.

Q. And that is about all you know about it, isn't it Mr.

A. No.

Q. —that you don't agree with him?

A. No, I know a great deal about it, I think, Mr. Fitzhugh.

Q. Did Mr. Freese in finding his general overheads use [fol. 3416] the book cost?

A. No, I don't think he did.

Q. What did he use?

A. He used a method of computing which I think, perhaps, was based somewhat on his analysis of the charges which had been made to the account of general and undis-

tributed overheads, but he modified that, as was disclosed by his testimony.

Q. He considered, did he not, all the operating expenses

for the period?

A. Yes, I think he did; that is correct.

Q. And when he got through he had about four times what the actual general overheads on the property constructed were, did he not?

A. As reflected by the Company's books?

Q. Yes, sir.

A. That is correct. I don't think that the figure you—the multiplier that you cite is correct; but I know that he did increase the actual charges by some factor which he applied.

Q. And in spite of the fact that he ended up with four times as much as the books actually show, you still say he is

wrong about it?

A. Absolutely. I agree with you, Mr. Fitzhugh, in your statement that you made yesterday that historical costs have no particular application to the reproduction costs of a property.

[fol. 3417] Q. Well, I made that statement in connection

with a particular type of property, did I not?

A. Yes; and I think it applies equally to all property when you make a reproduction cost estimate. I don't think you can—

Q. I was talking about the computed high powered guesswork that Mr. Steinberger brought in here at the time,

wasn't I?

A. I don't know how you feel about Mr. Steinberger's records, but I don't think they are high powered guesswork. I think they are excellent construction records. Furthermore, I don't believe it would be proper in making a reproduction cost estimate to assign or ascribe great emphasis to the historical costs in one part of the estimate and then throw historical costs out of the window in checking up on the other part of the estimate.

Q. You didn't understand, then, yesterday that my objection to Mr. Steinberger's historical cost was the fact that it was a computed cost rather than an actual cost?

A. No; I just understood you to say that historical costs were not particularly applicable in a reproduction cost estimate; and I agree with you, Mr. Fitzhugh.

- Q. Yes. Well, you understood me, Mr. Connor, just about as well as I understand Mr. Freese?
  - A. I think so.
- Q. Now, you have already testified that you estimated yourself in testifying before the Railroad Commission that the total life expectancy of Texas wells—being those wells [fol. 3418] connected on December 31, 1931—was 13.86 years?

A. I don't know that I did that, Mr. Fitzhugh. I can't recall just exactly what I said. I might have testified that the decline in rock pressure between two periods would

indicate that fact.

Q. Just to refresh your memory, Mr. Connor, I will show you an exhibit. On page 83 of the exhibit that you introduced as Exhibit No. 18 before the Railroad Commission, didn't you testify that the total life expectancy of Texas wells, there being 347 connected as of December 31, 1931, was 13.86 years?

A. That is correct. Based on the rock pressure decline

within a given period of time.

Q. And notwithstanding that testimony of yours, you now object to the use of a 13-year life for the equipment, lines, and so on attached to wells?

A. That is correct; I do.

Q. Was there anything wrong with your computations?

A. No, not with those computations, but in the application of the computations.

# Mr. Griffith: You mean Mr. Freese's application?

A. Yes. The decline of the life expectancy indicated by the decline in rock pressure in a group of wells in any given period might mean a great deal and might mean nothing at all. The life of a gas well is dependent upon the rate at which gas is taken from the well, and not the passage of [fol. 3419] time at all; and you could make a decline in rock pressure on wells in one year which would be ten times the amount of the decline indicated by that period; and the life of your wells would not be controlled at all by anything except the rate of withdrawals from those wells.

Q. Well, what was the use of making this computation

f if you didn't want to use it on anything?

A. Well, I have come to the conclusion after a year's study that there wasn't any use in making it.

Q. Yes, sir. Now, then you testified yesterday that the

general overheads allowed by Mr. Freese constituted ten

per cent. of the physical property costs?

A. No, sir, I did not. I answered a question propounded by counsel relative to that percentage. I did not figure any percentage.

Q. Well, what was the actual amount he used?

A. I think Mr. Biddison made a calculation subsequently that indicated that the percentage was approximately 11.8 per cent.

Q. All right, sir. You and Mr. Biddison fell into the

same error on that, didn't you?

A. No, sir, I didn't fall into any error at all. I made no

computation.

Q. Well, that was the first time, then, when Mr. Biddison made the correct calculation, when you knew what the percent, was?

A. I was not interested in the per cent; I was interested in the amounts ascribed to the individual accounts.

[fol. 3420] Q. All you knew, as a general proposition, was

that Mr. Freese was wrong, is that it?

A. That is correct.

Q. Now, you introduced an exhibit showing the attachment of business on various lines. I believe your exhibit covered Lines L, O, and a couple of others—K and another?

A. I show in the exhibit, Mr. Fitzhugh, the rate of attachment of business on Lines L, E, and O, and the history of

the use of Line K.

Q. Do you know what the earnings for the business upon Line K have been?

A. No, because earnings on Line K would mean nothing at all, because there are very few sales made off of Line K, and K is what might be called a major transportation unit which delivers gas into a group of other lines.

Q. Do you know what the earnings on Line O have been?

A. No, I don't know what they have been, Mr. Fitzhugh; but they would have been considerably more than they have been if that business had been instantaneously attached.

Q. As a matter of fact, you are not able to segregate

earnings by Lines, are you?

A. No; I wasn't interested in it.

Q. Now, what difference would it make whether your business came fast or whether it came slow if all of the time you were allowed to earn a sufficient return on your property being used in public service?

A. Are you speaking now historically? [fol. 3421] Q. Yes, sir, at any time. I am asking you this question,—does it make any difference right now—to-day—whether your Company is using a hundred per cent. of its line capacity or only ten per cent., or whether it only has ten per cent. of its customers attached or whether individual customers are only using ten per cent. of their potential consumption of gas, so long as your Company is being allowed to get a fair rate of return on its property used in public service?

A. Why, it makes all the difference in the world.

Q. Why does it?

A. Why, because if you had ten per cent. of your business attached to the system of the Lone Star Gas Company there is no rate that could be fixed in the world which would allow you to earn anything on that property.

Q. Well, I am asking you for the purposes of my question if you are getting enough in your rates to earn yourself a fair rate of return on your property investment, now assuming that,—could it possibly make any difference whether you had three customers on the line of three billion customers on the line?

A. No, sir, if you want me to assume that three customers would pay the rate of return on seventy millions of property through their gas rates, I am willing to agree to your hypothetical question.

Q. It would not make any difference whether they used ten per cent. of your line capacity or a hunderd per cent? [fol. 3422] Q. All right. Now, it would take a history of the company to find out whether you have been deprived of a fair rate of return since the very day you started business?

A. No, sir, I don't think that has anything to do with it.

Q. You don't want to make that?

A. I wouldn't be interested—I wouldn't be interested in whether the Company made or lost money in making a reproduction cost estimate.

Q. You know, don't you, Mr. Connor, that your Company has always gotten a fair rate of return on its value through rates?

A. I do not know.

- Q. Now, this matter or consumer attachment is something that you say is ordinarily significant in finding going value?
  - A. Absolutely, or in measuring going value, yes.
- Q. In measuring going value, which you found in excess of seven million dollars?
  - A. That is correct.

Redirect examination.

### Questions by Mr. Griffith:

Q. Mr. Connor, in answer to a question propounded on [fol. 3423] cross examination by Mr. Fitzhugh, I understood you to say that your exhibit,—that is, Defendant's Exhibit 49, did not reveal the chief error, in your opinion, in the calculations on page four of Plaintiffs' Exhibit 7?

A. That is correct.

Q. To what error do you refer?

A. If reference is made to page four of Plaintiffs' Exhibit 7, it will be found that in the third column under the heading "Annual Rate for Replacements and Amortization Per Cent", that the figure 1.70 is found, and continues from the year one to the year forty-five. That figure, as indicated by the heading, is the annual percentage which Mr. Freese suggests should be applied to property in service to provide for replacements and to amortize the property. Being a dual function, it is necessary to segregate that figure into its two component parts. A six per cent. sinking fund accrual over a forty-five year period to amortize a hundred per cent of the property would require an annual accrual of .47 per cent. If a .47 per cent is deducted from the 1.70 per cent, shown in column three, there is left an average-a uniform annual accrual for the costs of replacements and abandonments of 1.23 per cent.

Q. And will that be adequate?

A. No, but that is not the particular point which I have in mind. Mr. Freese testified yesterday that the property was approximately twelve years old—that is, the main [fol. 3424] transmission system of Lone Star Gas Company at the date of this figure was approximately twelve years old. If reference is made to page 4—

Q. Of Plaintiffs' Exhibit 7?

A. Of Exhibit 7, it will be found that in the last column there is an amortization fund for the twelfth year of 22.68 per cent. That 22.68 per cent. represents, when applied to the transmission system property only, a sum of money equal to \$6,130,000.00, approximately. In order for the calculations which Mr. Freese makes subsequent to the year twelve in the first column to come out, it will be necessary to use that \$6,130,000.00, approximately, by the application of six per cent. interest to it. In other words, there will be necessary a supplementary fund created by the use of that money, to provide for an inadequacy of the replacement rates which Mr. Freese's calculations show will be incurred after the thirteenth year. For instance, in the fourteenth year of the proposed life, the replacement rates calculated by Mr. Freese are 1.27.

Q. As shown in the second column of page 4 of Plaintiffs' Exhibit 7?

A. That is correct. That is in actual excess of his accrual for that same year. That excess gradually increases from year to year, as indicated by Table 2, page 4, of Plaintiffs' Exhibit 7. In other words, it is necessary to use a credit balance, assumed or otherwise, in the depreciation reserve, [fol. 3425] according to the computations made by Mr. Freese himself, in order to provide for the inadequacy of his accrual rates for the current and future replacements in the main transmission system of Lone Star Gas Company.

Q. That is assuming an average life of the property of twelve years?

A. As of this date?

Q. Yes.

A. That is correct.

[fol. 3426] Recross-examination.

# Questions by Mr. Fitzhugh:

Q. Mr. Connor, all of your testimony that you have given on this matter, and the calculations you have made are based on the same assumption you made in the original exhibit introduced by you that there are no funds now on hand in a theoretical amount, or actual amount either, available for use in making repairs and replacements?

A. I think you have stated my position substantially

correct. However, in view of the importance of my answer, I would like to give it to you myself. It is my position that in so far as the necessary replacements required for Lone Star Gas Company from the date of this inquiry forward are concerned that those rates must be adequate for that purpose and cannot be supplemented to make up for any inadequacy by withdrawals from a credit balance in a reserve accrual theoretical or actual.

Q. And where the records of the Company show that they now have a reserve of fifteen million dollars, your calculations show it would not be necessary for you to call on

that for so much as a penny?

A. That is correct; and my answer would be the same if, instead of having a credit of fifteen million dollars, they had had a debit balance of fifteen million dollars.

[fol. 3427] E. F. Schmidt, a witness for the defendant, recalled, testified as follows:

Direct examination.

### Questions by Mr. Griffith:

Q. Mr. Schmidt, there has been introduced in evidence here by the plaintiffs what has been styled Plaintiffs Exhibit 4, and I refer you to page 9-A of that exhibit. Does page 9-A of Plaintiffs' Exhibit 4, in the column headed "12-31-33" disclose the net Oklahoma gas sold in Texas neglecting line loss in thousands of cubic fee- to be 132,381?

A. It does.

Q. Now, that figure of 132,381 would represent 132 billion 381 million, would it not?

· A. No; 132 million 381 thousand.

Q. Correct. Mr. Schmidt, in connection with the public service operations of the Lone Star Gas Company, has the service which has been rendered been good or otherwise?

A. The service has been extremely good.

Q. In connection with the public service operations of the Lone Star Gas Company, and at times of maximum or peak demand, has it been necessary for the Company to utilize for the supply of customers in the State of Texas the gas produced and/or purchased in the State of Okla-[fol. 3428] homa, and also the Oklahoma facilities of the Company? A. It certainly has been.

Q. If Lines H and 2nd H and Line G were only utilized for a period of one day during an entire calendar year, would it be necessary that the Company utilize Lines H and 2nd H and Line G and the Oklahoma gas produced and/or purchased to meet the demands in connection with its public service business in the State of Texas?

A. It certainly would, or else we would have a shortage

of gas in many of those cities.

Q. In North Texas?

A. Yes.

Q. Mr. Schmidt, what was the primary source of gas supply for the Company for the calendar years 1918 to 1924?

A. Petrolia was one of the principal sources; then, following that, in Southern Oklahoma, in what was known as the Keys Field.

Q. Was that in Cotton County, Oklahoma?

A. Cotton County, Oklahoma, yes.

Q. All right.

A. Then a little later the Duncan Field.

Q. Is that in Stephens County, Oklahoma?

A. In Stephens County, Oklahoma, southwest of the city of Duncan. Then in the Fox Field, Oklahoma, which is located northwest of Ardmore in Love County, I believe.

Q. In Cartne County?

[fol. 3429] A. Carter County is correct.

Q. Mr. Schmidt, during the years 1918 to 1924 was the gas produced and/or purchased by the Company in the State of Oklahoma by far the principal amount of the gas which the Company transported and sold at wholesale at the city gates of the towns and cities served in northern and central Texas?

A. It was.

Q. Mr. Schmidt, in connection with the public service operations of the Company within the State of Texas, is the Company able to meet at times the maximum demand or maximum requirements for gas put upon its public service properties or facilities, without the use of the Company's own gas wells, gas well equipment, and other production system property?

A. No, sir.

Q. Is that true both in the West Texas gas fields, as well

as in the Panhandle gas field, or what we know in this case as the Shamrock territory, of Wheeler County, Texas?

- A. That is correct.
- Q. Mr. Schmidt, some reference has been made in this case to the fact that in the year 1933 the Company was able to buy some 24-inch pipe at a price of approximately two dollars per foot, whereas the quoted price was approximately three dollars per foot. Are you familiar with the [fol. 3430] facts and circumstances attendant upon the purchase of that pipe?
  - A. I am.
- ' Q. For what purpose was the pipe purchased?
- A. The pipe was purchased to replace some pipe in Line O east of Joshua.
  - Q. East of the Joshua Compressing Station?
- A. That is correct. This pipe was National Tube seamless pipe. The manufacturers of this pipe, in order to keep the surfaces smooth, use a certain salt. This pipe, evidently, was left over on an order which the National Tube Company had and it was in storage for some considerable time. The original pipe was 5/16—
  - Q. Five-sixteenth what?
  - A. Five-sixteenth of an inch thick.
  - Q. That is, that was the wall thickness?
- A. Five-sixteenth of an inch thick, yes, sir. Theoretically, that pipe would have a weight of about something around 85 pounds a foot. On account of this salt and being in storage for sometime, the salt reacted on the walls, reducing the wall thickness. It was sold to us as 9/32 pipe, which has an average weight of 71 pounds. This pipe actually weighed a little better than 80 pounds, so that the wall thickness was somewhere between 9/32 and 5/16. When we received the pipe,—or rather before the pipe was shipped to us, it was tested at 900 pounds hydrostatic pressure. Every joint [fol. 3431] was inspected and had hydrostatic tests. It was thoroughly cleaned, wire brushed inside and outside, and coated on the outside when shipped. When we received the pipe we were afraid that that salt might continue to react—
  - Q. On the interior of the pipe?
- A.—on the interior of the pipe, and we coated the interior of the pipe with a chemical known as nooxid, manufactured by the Dearborn Chemical Company. This, we

felt, would make the pipe just as good as the standard pipe. The pipe replaced was about 6300 feet—

Q. In Line O?

- A. In Line O. And we felt since we could get this pipe at around two dollars a foot, with its added capacity and suitability for our purposes, that we should substitute that for the 18-inch.
- Q. Now, Mr. Schmidt, would you have been able to get a price of two dollars a foot upon that pipe if it had not been for the fact that the pipe had had this reaction from the salt application?

A. No, sir; we would not.

Q. Mr. Schmidt, it was not a discount price?

A. No, sir; it was not a discount price.

- Q. It was merely a sale of some goods by the National Tube Company which was not considered as suitable for sale according to standard specifications?

  [fol. 3432] A. That is correct.
- Q. Now, Mr. Schmidt, referring again to Plaintiffs' Exhibit 4, where for the year 1933 the net Oklahoma gas sold in Texas is shown to be 132,381 thousand cubic feet, I will ask you if you have again checked your figures as set forth in Defendant's Exhibit 44, reflecting the net amount of Oklahoma gas produced and/or purchased and transported into the State of Texas?

A. I have.

- Q. How did you make that check, and how does that check compare not only with the net amounts of Oklahoma gas, produced and/or purchased in the state of Oklahoma and transported into the state of Texas, but also compare it with the figure of 132,381 thousand, shown on page 9-A of Plaintiffs' Exhibit 4?
- A. I would like to show on the map how I worked it out on the H System, which brings gas from the Duncan and Chickasha fields. We have at Petrolia two main line meters. I took the measurement on those two meters from our records, and added to that the deliveries off the H System between the Red River, which is the state line between Texas and Oklahoma, and the meters at Petrolia. On the G System, which brings gas from the Fox, Loco, Palacine, and Robberson fields, we have a meter located at Gainesville.

Q. South of the Red River and in the State of Texas? [fol. 3433] A. Yes, sir. We also have meters at Dixie Junction on the three lines, one coming from the Loco and

Palacine fields, and the other two lines coming from the Robberson-Fox District. So I have two checks. So subtracting from those meters the deliveries in Oklahoma, which was at Marietta, north of the Red River, gave me a check on the Gainesville meter, and I have those figures. On the G System, at Dixie Junction, the three meters showed a total of 567,314 thousand. Subtracting the sales to Marietta, which is south of Dixie Junction, and between these meters and the State Line, Marietta sales were 29,277,000, giving a total delivered into Texas from the G System of 538,037,000. As a check on that meter, the Gainesville meter showed 539,984,000—a difference of 1,900,000 cubic feet.

Q. Well within the range of accuracy of orifice meters?

A. Well, within the accuracy, yes, sir. On the H System the meters at Petrolia showed a total of 465,694 thousand. Adding to that the sales at Petrolia and Byers, and main line sales amounting to 108,421 thousand, gives a net amount delivered into Texas from the H System of 574,115 thousand. Adding that to the G System—

Q. That is the net deliveries of the G System into Texas?

A. Adding the net deliveries of the G System into Texas of 538,037 gives 1,112,152,000 cubic feet of gas delivered from the Oklahoma fields into Texas.

[fol. 3434] Q. And how does that figure check with the

figures shown in Defendant's Exhibit 44 which you sponsored?

A. I showed 1,210,791,000, or a difference of about 98,000,000, which is very close for main line measurement of

large volumes of gas under high pressure.

Q. Now, Mr. Schmidt, do I understand that the net total amounts shown by your check upon Exhibit 34—that is the net total amounts of Oklahoma gas produced and/or purchased and transported into Texas amounted to 1,112,000,000?

A. That is correct.

Q. Our exhibit 44 I should have said.

A. Exhibit 44 shows 1,210,000,000, and the main line

meter shows 1,112,000,000.

Q. Now, Mr. Schmidt, what is the excess of that amount over the amount of 132,381,000 cubic feet showin in the column headed "12-31-33" set forth on page 9-A of Plaintiff's Exhibit 4?

· A. A difference of 979,771,000.

Q. Or almost one billion cubic feet of gas?

A. Almost a billion cubic feet, yes, sir.

### [fol. 3435] Cross-examination.

### Questions by Mr. Fitzhugh:

Q. For the year 1933 how much gas was produced and

purchased in Oklahoma?

- A. In the Chickasha and Nellie fields, 734,629,000; in the Duncan field, 54,312,000; in the Loco field, 22,580,000; in the Fox field, 653,527,000; Robberson field, 207,007,000; Palacine field, 17,487,000; or a total of 1,690,342,000 from those fields.
  - Q. How much was used in Oklahoma during 1933?

A. On those two statements, 479,551,000.

Q. Now, you are just talking about certain lines, aren't you?

A. Deliveries from those fields.

- Q. Well, what was the total used in Oklahoma during 1933?
  - A. From all sources, something over a billion feet.

Q. About how much over a billion feet?

A. I do not have the exact figure, but, as I recall, it is one billion two hundred million, something like that.

Q. If your figures are correct, then the excess for Okla-

homa would be 490,342,000; is that correct?

A. No, sir.

Q. What is the correct figure?

A. The correct figure is 1,210,791,000.

Q. What was the excess of Oklahoma gas produced and purchased over the actual consumption of Oklahoma? [fol. 3436] A. The actual consumption of Oklahoma in all towns, regardless of where they are located?

Q. Yes.

A. As against the

Q. As against the gas purchased and produced in Oklahoma.

A. As against the gas purchased and produced in Oklahoma on the "G" and "H" Systems?

Q. No, on all systems. Now, you understand my question, don't you, Mr. Schmidt? I want to know how much gas was left after you deduct all the gas consumed in Oklahoma from all gas produced and purchased.

A. Well, the gas sold in Oklahoma did not come from

these sources.

Q. I didn't ask that. I asked you to make the simple deduction of the gas consumed in Oklahoma from the gas produced and purchased in Oklahoma.

[fol. 3437] A. The total production in Oklahoma from the fields as indicated, 1,690,342,000; sales in Oklahoma from all sources, 1,200,000,000, approximately.

Q. Well, now, what is the deduction?

A. That would make 490,000,000, but it doesn't mean anything, because those sales were not made from these sources.

Q. Well, what is the figure?

A. 490,000,000.

- Q. Now, how much gas from Oklahoma went into storage in 1933?
  - A. A small amount of gas went into storage.

Q. How much?

A. I do not have the figures.

Q. How much gas was stored on the Miller lease from Lines "H" and Second "H"?

A. I haven't the figures on it.

- Q. You would not be able to say, would you, Mr. Schmidt, whether it was over five hundred million or less than that?
- A. No; I would not say it was less than five hundred million.

[fol. 3438] Q. But you don't know how much?

A. No, sir.

- Q. Now, then, there has been some testimony in this case, if I remember correctly, that the gas stored on the Miller lease approximates five hundred million cubic feet per year, or for the year 1933. If I am correct in that, there would be a wash-out as to this 490,000,000 feet of gas, would there not?
- A. I don't know, because gas from the Fox field goes into storage at Petrolia; from the Fox field five hundred million comes into Texas.

Q. I am talking about gas stored on the Miller lease from Lines "H" and Second "H".

A. I don't know how much was stored on the Miller lease from Lines "H" and Second "H".

Q. Well, when you gave the figure of 132,000,000 cubic feet as taken from Plaintiffs' Exhibit 4 you did not intend for it to be a net figure, did you?

A. That is what it said.

- Q. Well, is the figure a net figure?
- A. I read the heading into the record that said-
- Q. Well, can't you answer "yes" or "no"?

Mr. Griffith: He said that is what it said, Mr. Fitzhugh.

- Q. Well, your answer is "yes"?
  [fol. 3439] A. Yes, sir, that figure as shown by that exhibit.
- Q. Well, isn't that figure exactly correct for the net amount?

A. No, sir.

Q. Why isn't it?

- A. Well, I know that five hundred million feet came into Texas through the "G" System—something better than five hundred million. How could 132,000,000 be correct, then?
- Q. Well, what do you mean by "net figure"—don't you mean the excess of the total over the amount deducted?

A. Well, you are deducting figures that have nothing to

do with production in Oklahoma.

Q. For the current year, Mr. Schmidt, 1934, and judging by the reports that have already come into your department, or for as much of the year as has passed, will the amount of gas produced and purchased in Oklahoma be as much as the gas consumed in Oklahoma?

A. It will be very much in excess, even more than it was

in 1933.

Q. What is your basis for it?

A. The figures you just referred to—the statement of it.

Q. You haven't brought in any more gas fields up there, have you?

A. No; we are taking more gas from Oklahoma.

Q. They have dropped off about a million up there yearly up to this time?

A. The total in Oklahoma, I expect, is about the same [fol. 3440] as it has been—the sales.

Q. Don't your own exhibits show it?

A. They do for the years I show, but I have not shown 1934.

Q. Now, then, you have explained, to your own satisfaction at least, Mr. Schmidt, these purchases of pipe?

A. I have explained the actual conditions under which we

purchased it.

Q. Now, I will ask you if all the painting on the inside of the pipe was not to prevent interior corrosion of the pipe being placed in the system at or near Joshua, Texas?

A. No, sir. We replaced other pipe in the same system.

Q. Well, Mr. Schmidt, if you have got salt on the inside of the pipe and it is going to cause corrosion, what difference would it make if you paint it over?

A. It counteracted the action of the soil. It was not paint

we used; we used a chemical.

Q. What is NO-OX-ID?

A. It is a grease, a chemical.

Q. What is it?

A. It has an inhibitor in it; it is composed of various hydrocarbons and greases.

Q. Well, there isn't anything in it to chemically react on salt?

· A. It has other constituents that react with the salt.

Q. What was the chemical that you say reacted? [fol. 3441] A. I am not a chemist, but I know we had the thing investigated.

Q. Well, you are the General Superintendent-don't you

know what the reaction would be?

A. There may be twenty-five different chemicals.

Q. One of them neutralizes salt?

A. Several of them tend to.

Q. Now, then, can you state, Mr. Schmidt, a single actual purchase of pipe made by your company for pipe line purposes where you did not obtain as much as a ten per cent discount below the quoted price?

A. I can't name any purchase, Mr. Fitzhugh, as to price;

no, sir.

Q. Now, when your company appeared before the Railroad Commission and testimony was taken there on pipe purchases and we referred you to vouchers for 1931 and 1932 you explained those as being distress purchases?

A. They were.

Q. I will ask you if we ever pulled a voucher on your company yet that you didn't have an alibi for the purchase?

A. I have not made any alibi, Mr. Fitzhugh, that I know of.

#### Redirect examination.

## Questions by Mr. Griffith:

- Q. Mr. Schmidt, will you turn around to where you can see the map which has been introduced in evidence and styled Defendant's Exhibit 29; that is the map of the pipe line system of the company, is it not? [fol. 3442] A. Yes, sir.
- Q. Will you refer to Defendant's Exhibit 44, which was prepared by yourself and which covers gas transported by the Lone Star Gas Company for the year 1933. Now, Mr. Schmidt, the Chickasha field is situated in Grady County, is it not?
  - A. It is.
- Q. And you have testified that the Duncan field is situated in Stephens County?
  - A. That is correct.
  - Q. Lines from there are Line "H" and Second "H"?
  - A. That is correct.
- Q. Those lines are twelve-inch lines running from Southern Oklahoma to Petrolia, in Clay County, Texas.
  - A. That is right.
- Q. Now, again referring to 1933 prices as set forth in your Exhibit 44, Line "G" is a 16-inch line which extends in a southeasterly direction from Stephens and Carter Counties, Oklahoma, through Love County, Texas, across the Red River into Texas and down to Gainesville, in Cooke County, Texas?
  - A. That is correct.
- Q. Now, off of Line "H" and Second "H" and through various tap lines, and also off of Line "G" in the State of Oklahoma and the lines running into Line "G", the company makes sales of gas, does it not, to the city gates of numerous towns and cities?

  [fol. 3443] A. That is correct.
- Q. Now, what are those towns and cities which are supplied with gas which is exclusively purchased and/or produced in the State of Oklahoma?
- A. Davis, Elmore, Marietta, Maysville, Paoli, Pauls Valley, Sulphur, Wayne, Wynnewood, Loco, Hastings, Ryan,

Temple, Walters, Waurika. Of course, there is a certain amount of small sales—

Q. Just to a few right of way customers?

A. That is right.

Q. Now, in addition to the sales by the company of gas produced and/or purchased exclusively in the State of Oklahoma to the several towns and cities which you have just mentioned, the company also delivers gas to the Loco, Fox and Gas City Compressor Stations?

A. Yes, sir.

Q. Those are compressors stations now operated by the company in Oklahoma?

A. That is correct.

Q. Now, what were the total deliveries of gas or sales of gas by the company in the State of Oklahoma of gas which was exclusively purchased and/or produced in the State of Oklahoma for the calendar year of 1933 as shown by your Exhibit 44?

[fol. 3444] A. With the compressor fuel and main line sales, it amounts to 479,551,000.

- Q. Now, that figure appears in the 1933 operations as set forth in Defendant's Exhibit 44?
  - A. That is correct.
- Q. Now, in addition to those sales which you have enumerated, does the company sell at wholesale at the city gates any other gas within the State of Oklahoma and did it so sell any other gas in the year 1933?

A. It did.

Q. What was the source of that gas supply?

A. From the Shamrock field in Wheeler County.

- Q. In other words, all other gas which was sold by the company in the State of Oklahoma originated in the State of Texas in the Shamrock field of Wheeler County, Texas?
  - A. With the exception of the sales at Durant and Hugo.
- Q. Those sales being made by Line "E" from the State of Texas?

A. That is right,

Q. Now, what were the sales of Texas-produced and/or purchased gas which were made by Line "A" in the State of Oklahoma during the calendar year 1933?

A. Included with the sales to the Hollis Gasoline Plant, it

amounts to 334,938,000.

Q. What were the towns and cities which were supplied wholesale with gas in the State of Oklahoma and which [fol. 3445] gas was purchased and/or produced in the State of Texas and sold by the company?

A. The cities of Hollis, Davidson, Frederick, Tipton, Manitou, Snyder, Mountain Park, those are the cities supplied off of Line "A".

Q. Now, what were the sales of gas off of Line "A" in Oklahoma of gas which was produced and/or purchased in the State of Texas?

A. 334,938,000.

Q. Now, you were interrogated concerning the net amount of gas transported from the State of Oklahoma into the State of Texas—and I refer solely to the gas which was purchased and/or produced in the State of Oklahoma. You [fol. 3446] have previously testified that through Line "G" more than five hundred million cubic feet of gas was delivered from Oklahoma into Texas in the calendar year 1933?

A. That is correct.

Q. Did any of that gas coming through Line "G" into the State of Texas go into storage at Petrolia, Texas?

A. Not any, no, sir.

[fol. 3447] D. A. Hulov, a witness for Defendant, having been recalled, testified as follows:

Direct examination.

Questions by Mr. Griffith:

Q. Mr. Hulcy, have you examined Plaintiffs' Exhibit 6, that purporting to be a reproduction cost new appraisal of the Texas gathering, transmission, compressing, and general property of the Lone Star Gas Company, as of June 15, 1934?

A. Yes, sir, I have.

Q. As made by Mr. S. W. Freese?

A. Yes, sir I have examined that exhibit.

Q. Have you noted the administration and legal expenses and other overhead and general undistributed costs as set forth in said exhibit?

A. Yes, sir, I have.

Q. Mr. Hulcy, based upon your own experience, what has been true of the relation between historical general and undistributed costs as capitalized by operating companies on construction projects, and as between historical—as between actual general and undistributed costs incurred in connection with wholesale construction of a new project? A. Well, based upon my experience, [fol. 3448] Griffith, no comparison can be made of the general or socalled undistributed costs during wholesale construction as with a company—that is, an operating company, which does construction during that operating period. Now, that statement is based upon this, -as stated before, I am Secretary and Comptroller of the Northern Natural Gas Company and its underlying companies. These companies were organized in April of 1930. They constructed a major gathering and transportation system extending from the Panhandle fields in Texas through the State of Oklahoma, the State of Kansas, into the State of Nebraska, and also into South Dakota.

Q. Also into the State of Iowa?

A. Yes, sir, that was a branch off of the main line in the State of Nebraska. These lines were all constructed in the year 1930. Therefore the total administration, legal, and all other overhead expenses incurred by the company for that year were 100 per cent applicable to construction. There were no operating expenses, and in fact that property was turned over for operation as at January 1, 1931. In the year 1931 this transportation system was extended from a point in Iowa on into the State of Minnesota, and for a portion of the year 1931 there was a sizable amount of construction going on. In the latter part of the year 1931 and during the first part of the year 1932 there was very little construction going on. In fact, it might be likened, we might say, to almost 100 per cent operation. Therefore, when the ex-[fol. 3449] penses had been charged directly to construction during the 100 per cent construction period, in this latter period all expenses were made—all charges were made to operating expenses. The personnel was there—the general auditor, the purchasing agent, the supervisor of stores, the chief clerk of the accounting section, the chief distribution

clerk, the chief construction accountant; it was necessary to have each of these individuals during the operating period. Now, beginning in the latter part of 1932 and continuing through the first part of 1933, other sizable extensions were made, including additions to the property account of approximately five millions of dollars. The added personnel due to this construction was very, very small; it consisted of a few minor clerks scattered out in some of the departments; for instance, it was not necessary to employ another purchasing agent, it was not necessary to have another general auditor, neither was it necessary to have another chief distribution clerk, or another chief construction accountant, because those individuals were there. necessary during the operating period that all of those employees be had and included in the organization. that reason I say that there is absolutely no comparison between the costs incurred during a wholesale construction period and the costs incurred in connection with construction handled by an operating company. Now that has been my experience in connection with matters of that kind. [fol. 3450] Q. In connection with the construction of a very sizable gas project?

A. Yes, sir, the actual cash costs of this natural gas project—that is, the Northern Natural Gas Company, and its associated companies, are in excess of forty millions of

dollars.

Q. And that work has all be-done within the last four years?

A. Yes, sir, begun in April of 1930.

Q. Mr. Hulcy, do you know what the legal expense of the Northern Natural Gas Company was as incurred in connec-

tion with the construction of its property?

A. Yes, Mr. Griffith, I have that information in my files, and for the year 1931, for the year 1932, and part of 1933 the amount of legal expense charged to construction was in excess of \$400,000.00.

Q. And that was on a property which had a capital ac-

count of approximately \$40,000,000.00?

A. That is correct. Now, there have been some additional legal expenses charged since that time. However, they would be small when compared with \$400,000.00.

Q. Mr. Hulcy, in connection with the Northern Natural Gas Company have you had some experience in connection with the cost of financing and the obtaining of money?

A. Yes, sir, I have.

Q. For construction projects?

A. Yes, sir.

[fol. 3451] Q. Is the Northern Natural Gas Company, in so far as its operations are concerned, substantially similar to the business and operations of the Lone Star Gas Company?

A. Yes, sir, that is correct; the Northern Natural Gas Company and its underlying companies are made up principally of production, gathering, transportation and sale at

city gates.

Q. Has the Northern Natural Gas Company within the last two years had occasion to borrow large sums of money for the purpose of constructing natural gas transmission lines and other natural gas properties?

A. Yes, sir, and I would say particularly within a period of three years, and even on down within a period of a year, and later it has been necessary for the Northern Natural Gas Company to make arrangements about finances.

Q. Does the Northern Natural Gas Company at this time have borrowed a very substantial sum of money and which sum of money has gone into the construction of its properties?

A. Yes, sir, they do have.

Q. What total amount does the Northern Natural Gas Company have borrowed as of this time?

A. At the present time approximately sixteen and one-half millions of dollars.

Q. At what rate—what rate of interest is being paid upon that loan, and what is the current cost of that money to the company?

A. The current cost of that money to the company is 7 per [fol. 3452] cent; that is made up of an annual interest rate of 6 per cent plus a bonus of 1 per cent for the option to renew those notes at the end of the six months period; or, in other words, the notes are made for six months, dated as at March first of this year. According to the agreement—and this same agreement has actually been carried out for the past two years—on September first, that is the due date on these notes, the company has the option to renew those notes for another six months period, provided they pay a bonus of one per cent on the total amount of money borrowed. So

that makes the current cost of the money 7 per cent per annum.

Q. Is that money owed upon the straight note obligation

of the Northern Natural Gas Company?

A. No, sir, it is not. In addition to the note being signed by the Northern Natural Gas Company it is also endorsed and guaranteed by each of the companies owning the common capital stock of the Northern Natural Gas Company, which are the North American Light and Power Company, the United Light and Power Company, and the Lone Star Gas Corporation, and those are individually and severally.

Q. Does that make, in your opinion, for a well secured

obligation?

A. Well, I feel that it does, Mr. Griffith. These three com-

panies which I have just mentioned-

[fol. 3453] Q. That is the North American Light and Power, the United Light and Power, and the Lone Star Gas

Corporation?

A. That is correct. The total property account of these three companies is approximately one billion dollars. Now, all of the assets owned by these three companies are behind that note, and that is in addition to the total value of the properties of the Northern Natural Gas Company which is in excess of forty millions of dollars.

Q. Is there any bonded indebtedness outstanding against

the property of the Northern Natural Gas Company?

A. No, sir, there is not. This note would have first call; in fact, the remainder is common stock equities.

Q. Which was put into the Northern Natural Gas Company by the three major stockholders?

A. Yes, sir, in cash.

Q. Mr. Hulcy, on yesterday there was some testimony relative to Lone Star Gas Corporation 5 per cent debentures outstanding?

A. Yes, sir.

Q. The Lone Star Gas Corporation does have some 5 per cent debentures outstanding?

A. Yes, sir, they do—an issue in 1927 amounting to some fifteen millions of dollars.

Q. And maturing in what year?

A. In 1942; or, in other words, they are known as fifteen year debentures.

[fol. 3454] Q. Are those debentures the same as a current note?

A. Not the Lone Star Corporation debentures.

Q. Is there any security back of those debentures?

A. Yes, sir, there certainly is.

Q. What is that security?

A. The security back of these debentures is the total of the securities held and owned by the Lone Star Gas Corporation. These securities consist not only of the common capital stocks of the underlying companies owned by the Lone Star Gas Corporation, but also consist of all of the bonds that have been acquired by the corporation in the open market of any underlying company or other company, or, in other words, any security that was at that time in or that has since then come into the possession of the Lone Star Gas Corporation is placed under the indenture for the protection of those debenture bonds.

Q. Now, does the fact that 5 per cent was the coupon rate on those debenture bonds indicate that that was the

cost of the money to the company?

A. No; no, it does not for this reason—

Q. Was the cost of the money procured from these debentures more or less than 5 per cent per annum?

A. Well, it was more than 5 per cent per annum.

Q. Why was it more?

A. Well, the debentures were sold at a price of about ninety-five, as I recall. Now, in addition to that there were legal expenses and other expenses involved in connection [fol. 3455] with the issue of the debentures; there was the cost of the preparation of the debenture bonds themselves, and then in addition to that the company does make refunds of certain taxes that are paid on the interest received—that is, both Federal and, I believe, the State of Pennsylvania; so, to whatever extent those refunds are made, plus the amortization of expenses in connection with the issue of the bonds, also the discount in connection with the issue of the bonds, all of those items tend to increase the rate over and above 5 per cent per annum.

Q. And as you say, Mr. Hulcy, that issue was put on the

market in the calendar year 1927?

A. That is correct; I believe the issue is dated May 1, 1927.

Q. Was the security market then more favorable for the issuance of natural gas securities than it is now?

A. Well, a great deal more favorable.

Q. Mr. Hulcy, have you examined Plaintiffs' Exhibit 8?

A. Yes, sir, I have. I believe I saw a copy of it on yesterday.

Q. Will you please refer to page one of Plaintiffs' Exhibit 8, which was sponsored in this case by Mr. S. W. Freese?

A. Yes, sir.

Q. Mr. Hulcy, included in the figure of \$40,256,862.39, as set forth in the lower left-hand corner of page one of this exhibit, is there included any production system property of the company in the State of Texas, and which production [fol. 3456] system property would embrace and include, among other things, gas wells, gas well equipment, gas well construction, gas reserves—both developed and undeveloped?

A. No, sir, it does not include anything for those items

which you have mentioned.

Q. Are all of those properties which the company actually owns within the geographical confines of the State of Texas, used and useful in the public service?

A. Yes, sir, they certainly are.

Q. What would have been the effect upon the calculation made by Mr. Freese in Plaintiffs' Exhibit 8 if he had allowed for depreciation, depletion, and return in respect of the production system properties of the company?

A. Well, in addition to that, Mr. Griffith, if the production system property had been included in his property values there would have been some other adjustments, For instance, Mr. Freese makes an allowance in the year 1933 of \$212,031.46 as being the value of the company produced gas. Of course, had he included the property in the production system property in his total property account, then he would not have made that allowance. Also, he has deducted the total production system property expenses, which, had he included the production system property, he would not have eliminated. Now, the calculation that I have made on Exhibit 8 eliminates the following item as [fol. 3457] shown on page 1 of Exhibit 4—that is, the accounting exhibit sponsored by the witness Phillips covering Texas operations—he has eliminated \$232,758.70 of production system expense for the year 1933, and that is the amount shown on page 1 of said Exhibit 4. Exhibit 4. on page 11, sets out the property account—that is, of the Texas properties at December 31, 1931, plus the net additions to the public service property on Texas properties from January 1, 1932, through March 31, 1934. Well, now, just forgetting about the net additions, and assuming that we had no production system property included in that amount at all, there is shown on this page of production system property an amount of \$4,432,920.19. Now, if Exhibit 8 had included that property and an allowance of 8 per cent—that is, six per cent for return plus two per cent for depreciation—that amount of depreciation and return would have been \$354,623.61, or an exclusion by Mr. Freese in the preparation of his exhibit of an amount of \$587,392.31.

Q. Now, that would include not only the 8 per cent upon the Texas production system property, but, as well, the operation expenses which Mr. Phillips determined were applicable to the production system property in Texas?

A. That is correct. Now, as I stated a while ago, Mr. Freese did add, to cover the value of company produced gas, an amount of \$212,031.46, and that, deducted from the total elimination, leaves \$475,360.85, which is due altogether to the elimination of the production system property from his [fol. 3458] property account and the exclusion of direct operating expenses which were actually incurred in Texas, and set out on page 1 of Phillips Exhibit No. 4.

Q. That is Plaintiffs' Exhibit 4?

A. That is correct—I mean sponsored by the witness Phillips. Now, in addition to that, I have made a calculation showing what the difference would have been in the Federal income taxes. Mr. Freese in calculating his Federal income tax makes an allowance for depreciation and depletion of \$831.946.08. However, in arriving at the deduction to be used in the calculation of the Federal income tax he takes depreciation at 5 per cent of his total property account, which is \$2,012,843.12, or a net excess depreciation for calculating income tax of \$1,180,897.04. Now, the income tax at 13% per cent on that amount would be \$162,373.35, or a total, including the net deductions on account of production system property being eliminated, of \$537,734.20, and that amount when expressed as a percentage of the property values shown by Mr. Freese and set out on page 1 of Exhibit 8 is 1.33 per cent. Now, Mr. Freese further shows on page 1 of Exhibit 8 that the return on the total property account shown by him would be 6.76. Now, if we assume that everything else is exactly right,

that amount deducted from the amount shown by him would be 5.43 per cent for 1933 as available for return.

[fol. 3459] Q. In other words, if you take every calculation of Mr. Freese as correct as set forth in the column on page 1 of Plaintiffs' Exhibit 8 headed "1-31-33" and include the production system property and the production system operating expenses and eliminate the value of company produced gas, you get, instead of the figure 6.76 per cent, as available for net return, the figure of 5.43 per cent.

A. That is correct. However, that adjustment does include the correction on Federal income tax—that is, that the same amount allowed would be used for the calculation

of the tax.

Q. And what would be similarly true in respect of the twelve months period ended March 31, 1934, as set forth on

page 1 of Plaintiffs' Exhibit 8.

A. Well, I am sure the same thing would be approximately true. I did not make any calculations on that period, Mr. Griffith. However, the amount available for return as shown on page 1 of Exhibit 8 is 6.74 per cent, which is 2/100 of 1 per cent less than the amount available in the year 1933. So, for that reason I say that the final answer would be about the same.

[fol. 3460] Q. Would it be less than five and a half per cent?

A. That would be my judgment in the matter, yes.

Q. Mr. Hulcy, have you prepared an exhibit showing the disposition of gas purchased and/or produced by the Company and transported through the "A" System and the "H" Systems for the year 1933:

A. Yes, sir; I have.

Q. Is this the exhibit to which you refer, being styled on the title cover: "Lone Star Gas Company. Receipt and Disposition of Gas Transmission Systems "A" and "H" Year 1933"?

A. It is.

Mr. Griffith: We offer the exhibit so identified by the witness in evidence.

(Thereupon the exhibit above referred to was marked for identification as Defendant's Exhibit No. 50.)

- Q. Mr. Hulcy, what does Defendant's Exhibit 50 purport to show?
- A. Exhibit 50 is a map showing the receipt and disposi[fol. 3461] tion of gas in the Transmission Systems "A"
  and "H". That is, we start out with the amount purchased
  and/or produced in the fields, and it shows at each point on
  the transmission system down to Petrolia, Texas, where the
  gas is disposed of; and it finally shows the net amount delivered at Petrolia for both the Shamrock Field and the Chickasha-Duncan fields.
- Q. For each of the towns and cities north and south of the Red River does it show the total of the city gate deliveries for the particular town or city?
  - A. That is correct; it does.
- Q. After deducting the line sales on the "A" System from the total of the Shamrock Field gas purchased and/or produced, does the map indicate the net delivery of Shamrock gas at Petrolia, Texas to be 3,381,496,000 cubic feet?
  - A. That is correct; it does.
- Q. After deducting all sales made in Oklahoma of Chickasha and Duncan Field gas, either purchased and/or produced, does the map disclose that the net delivery of such Chickasha and Duncan Field gas at Petrolia was 588,673,000 cubic feet.
- A. It does. However, included in the sales is the amount of gas sold at Petrolia, Texas and Byers, Texas, which is south of the Red River and north of Petrolia.
- Q. And those are two towns, which in the ordinary course [fol. 3462] of business, receive gas which is solely produced and/or purchased in the state of Oklahoma?
- A. That is correct. Now, this map was prepared to set out in detail just the source of supply, particularly of the gas sold in the A-1 System. Now, I mean by "A-1", the gas sold at Frederick, Manitou, Mountain Park, and Snyder; and that was prepared in connection with Exhibit No. 4.
  - Q. You mean Plaintiffs' Exhibit No. 4?
- A. Yes; that is correct, Plaintiffs' Exhibit 4; and I have particular reference to page 9-A, wherein the net gas sold in Texas neglecting line loss is shown, and from that amount of gas a calculation is made for the year 1933, showing the Texas-Oklahoma gas sales adjustment in the amount of \$29,617.92; and that amount is then transferred to page

1, or the Summary of Plaintiffs' Exhibit 4, and is shown as a deduction; or, in other words, allowed as an operating expense for the 12 months ended December 31, 1933. Of course, as has been previously said, the gas sold in the State of Oklahoma which has been purchased and/or produced in the State of Texas has nothing whatever to do with the net amount of gas delivered from the State of Oklahoma into the State of Texas; and upon that basis, and upon that assumption, I believe it would be well to offer an example showing that the method used in the preparation of the statement set out on page 9-A of Exhibit 4—

[fol. 3463] Q. Plaintiffs' Exhibit 4?

A. -of Plaintiffs' Exhibit 4 is not correct.

Q. What would have been the effect, Mr. Hulcy, upon the calculations set forth on page 9-A of Plaintiffs' Exhibit 4 if the Lone Star Gas Company had sold off of Line "A" a substantial volume of industrial gas in the State of Oklahoma?

A. Well, there is only shown 132,381,000 cubic feet, being styled as "Net Gas Sold in Texas." Now, if there had been an industrial sale made off Line "A"-a substantial industrial sale—then the net gas sold in Texas would have been negative, and using the same method of calculation it would have added to the Texas revenues, whereas he has allowed it as an operating expense. It would have been necessary to have changed all of his previous years; or, in other words, he would have gotten away altogether from the method he did use. Now, I have assumed, in order that we might illustrate this and show just what the effect would be, that during the year 1933 the Lone Star Gas Company secured an industrial customer located at Hollis, Oklahoma, and this customer would use in round figures five billion cubic feet of gas, and we will assume at a sales price of 10 cents a thousand-however, that does not enter into the calculations. Then referring again to page 9-A of Plaintiffs' Exhibit 4, the gas sold in Oklahoma would be increased [fol. 3464] from 1,135,394,000 cubic feet to 6,135,394,000 cubic feet; or there would be a negative net gas sold in Texas of 4,867,619,000 cubic feet. Now, the average sales price in Texas used by Mr. Phillips was \$.24870, or, in other words, approximately 25 cents per thousand cubic feet.

Q. That is shown in the second figure column on page 9 of Plaintiffs' Exhibit 4?

A. On page 9-A.

Q. Yes.

A. Now, this sale in the state of Oklahoma would not have affected in the least his average sales price in Texas, and that negative volume of gas at the average price would amount to \$1,210,576.84. Now, the Texas operations would have included as an expense the cost of the gas which was purchased and/or produced in the Shamrock Field of approximately \$100,000.00; and we will just assume that there was a small amount of operating expense in connection with that Shamrock Field to the Hollis plant, or to the Oklahoma state line, I should say. Say that is \$25,000.00; it would appear as a deduction in the Texas operations, so that amount when deducted from the net Oklahoma gas sold in Texas—the gas sales adjustment would be \$1,085,576.84, that would have been handled as a net operating expense; or, in other words, an addition of that amount to net in-[fol. 3465] come for the Texas operations; and all they did was to take the gas out of the field and sell it in the State of Oklahoma; and so when you apply a yardstick of that kind, you get an answer that is wrong; and therefore, I think that all of the calculations where you deduct gas sold in the State of Oklahoma from the gas purchased in the state of Oklahoma, where it has no connection with it whatever, the answer is bound to be wrong. We could as well assume that Oklahoma City was furnished off the Frederick tap off Line "A", and then the volume would be materially There is no connection between them at all, as I see it.

A. Yes, sir; they did.

A. Yes, sir; they did purchase pipe during that period.

Q. The Railroad Commission of Texas evaluated the pub-[fol. 3466] lic service property of the Lone Star Gas Company as of December 31, 1931, did they not?

Q. Did the Lone Star Gas Company and its affiliated companies purchase any pipe during the year 1931 and early in the year 1932?

Q. Have you prepared a compilation of those pipe puchased, and a comparison with the prices actually used in Mr. Freese as of December 31, 1931?

A. Yes, sir; I have.

Q. Is this the compilation to which you refer, being styled, "Lone Star Group Companies. Statement of Pip Purchases Through Pittsburg Office 1931-1932."?

A. That is correct.

Mr. Griffith: We offer in evidence the compilation identified by the witness.

(Thereupon the compilation above referred to wa marked for identification as Defendant's Exhibit No. 51

## [fol. 3467] Examination by Mr. Fitzhugh:

Q. Mr. Hulcy, this exhibit shows a bunch of purchase made by the Lone Star Gas Company, Municipal Gas Company, Community Natural Gas Company—

A. That is correct; the Lone Star Group Companie statement of purchases that were made through the Pitt

burg Office.

Q. What is the largest purchase for the Lone Star Ga Company that you show?

A. Of any particular size pipe?

Q. The largest purchase in dollars?

A. Well, sir; I don't have the dollar value.

Q. Well, do you have it in tonnage?

A. No, sir; I don't. I have it on a one hundred line feet basis. I might add, Mr. Fitzhugh, that I have her available at this time the original paid vouchers on ever purchase covered by this exhibit of the respective companies.

[fol. 3468] Q. By looking down your Quantity Orders column would it not seem that the largest purchase is it the purchase of 16-inch 47.215 pound per foot?

A. Yes.

Q. Plain end electric weld?

A. Yes, I am sure that is correct. There are two purchases of 18,200 feet, and I am sure that is the larges single purchase included in the exhibit.

Q. Now, there are no other purchases outside of this on

\in your exhibit that are more than a carload lot?

A. A single carload? I will say, Mr. Fitzhugh, my judgment is that there would not be anything here in excess of a carload.

Q. So that this purchase of the 16-inch 47.215 pounds per foot pipe plain end electric weld seamless is the only purchase in your exhibit for more than a carload lot?

A. You mean for more than a single carload lot?

Q. Yes.

A. Well, I really am not prepared to say, Mr. Fitzhugh. Very likely the grouping of certain purchases might have exceeded a single carload. I have just shown here the footage involved.

Mr. Griffith: In other words, you have shown the actual

purchases?

A. That is correct.

Q. The testimony in this case has been, has it not, Mr. [fol. 3469] Hulcy, that for large purchases of more than a

carload lot a different price would prevail?

A. Well, I understood, Mr. Fitzhugh, that it had to be pretty good size lots. Now, whether that dividing pointcomes in in a carload or not, I am not prepared to say, but it is my understanding that for large lots you do receive a concession and there is a difference in price—that is, small lot purchases at distinguished from large lot purchases. However, this exhibit was not prepared at a period when that division was made.

Mr. Fitzhugh: Now, Your Honor, we make this objection: that all of the purchases shown, except in the case of the 18-inch, or, rather, the 16-inch 47.215 pound per foot plain end electric weld seamless pipe, are not large lot purchases and take a different price from those that are large lot purchases, and therefore they can not be compared with Mr. Freese's price, which contemplates large lot purchases; hence the exhibit will be misleading for all sizes of pipe except the 16-inch. We are perfectly willing for it to go in on any large lot purchases, but we ask that all that are not large lot purchases be stricken.

[fol. 3470] The Court: I overrule the objection.

[fol. 3471] Direct examination.

## Questions by Mr. Griffith:

Q. Now, Mr. Hulcy, please refer to Defendant's Exhibit 51. The Lone Star Gas Company, Community Natural Gas Company, and Municipal Gas Company all have pipe purchases reflected in this exhibit?

A. That is correct.

Q. Were the same pipe prices available to each of the companies at the date of the purchase of each individual

purchase of pipe as reflected by the exhibit?

A. That is quite true. All of this pipe was purchased through Mr. J. M. Simpson's office in Pittsburgh, and he receives the same price for one company—that is, the Community Natural Gas Company or the Municipal Gas Company—as he would for the Lone Star Gas Company. There is no difference at all.

Q. Mr. Hulcy, taking up your pipe purchases in order, will you please explain how the exhibit is prepared?

A. It might be well to make this statement, Mr. Griffith, before we start. When I show Mr. Freese's price f. o. b. the mill, and Mr. Fitzhugh said it would not be a fair comparison, I mean by that the prices Mr. Freese used in his 1931 appraisal, and he got his prices from these very vouchers that I have got here. They are one and the same thing. So I thought it well to make that explanation. It [fol. 3472] is not what we have used in this present proceeding.

Mr. Fitzhugh: Do you mean the prices Mr. Freese shows f.o.b. the mill were taken from some other appraisal?

A. They are taken from the prices used by Mr. Freese before the Railroad Commission.

Q. And were the prices adopted by the Railroad Commission?

A. Yes, sir; they were.

Q. In its opinion and order in evidence?

A. Yes, sir; they were. This statement or exhibit has been prepared, showing the name of the company that purchased the pipe, shows the delivery point, the size of the pipe, weight per foot, whether it was single length or double length, shows the order number, shows invoice date, quantity ordered, voucher number, voucher date, and shows purchase price f.o.b. mill, gross and net.

Q. What do you mean by "gross and net"?

A. When I say "gross and net", the gross is the list price or the selling price; the net is less two per cent for cash discount if you pay within a specified time. In the quotation f.o.b. the mill it shows both gross and net and the price used by Mr. Freese at the mill, both gross and net. I have lined up opposite to the purchases upon which Mr. Freese has made his determination all the costs of the pipe. That is not true, though, on the two-inch, for the reason that there wasn't any purchase during the year [fol. 3473] 1931 where the price corresponded with the price used by Mr. Freese.

The Court: That applies to the two-inch pipe?

A. Yes, sir.

Q. Are these prices per 100 lineal feet f. o. b. mill Mr.

Freese's prices f. o. b. mill?

A. That is correct; that is the price per hundred lineal feet. During 1931 the Lone Star Gas Company purchased -it is a matter of record-37,000 feet of two-inch 3.652 pound lapy ld pipe. Mr. Steinberger in the preparation of his appraisal made an error and used a quoted price covering two-inch buttweld pipe instead of lapweld pipe, and to that extent he was wrong. He used a net price of \$11.12 per hundred lineal feet. The quoted price for two-inch was \$13.41 per hundred-lineal feet. The smallest pipe—the smallest price paid by the company during 1931 for two-inch lapweld pipe was \$12.01 per hundred lineal feet. On all other sizes of pipe-that is, where there was a specific purchase-Mr. Freese used the actual purchase price as his price. However, he did not do that on the two-inch. In making his calculation on the four-inch pipe he arrived at a discount to be used-and when I say "discount" I mean the discount applied to the net price usedof \$12.78 per hundred lineal feet; so he applied that same discount to the two-inch buttweld price and thereby ar-[fol. 3474] rived at a net price of \$9.70 per hundred lineal feet. There is not a great deal of the two-inch buttweld pipe in the Lone Star Gas Company System. Whereas the actual quoted price December 31, 1931, was \$13.41 per hundred lineal feet, and the smallest amount paid by the company for the actual pipe purchased in 1931 was \$12.01 per hundred lineal feet.

[fols. 3475-3486] Q. Now, Mr. Hulcy, you have made reference to certain vouchers in connection with these pipe

purchases—these various pipe purchases. Do you have those vouchers here?

A. Yes, sir, I do, right here—every one of them.

[fol. 3487] Q. In order that there may be no confusion about Defendant's Exhibit 51, would you be agreeable to having written above the words, "Quotation F. O. B. Mill", the words, "As of December 31, 1931."?

A. Yes, sir; that is what I intended.

Q. And would you also be agreeable to having written above the heading "Freese's Price F. O. B. Mill", the words, "As of December 31, 1931."?

A. That is correct.

Mr. Griffith: Mr. Reporter, will you make that change [fol. 3488] on the original copy of the exhibit?

(Thereupon the Reporter made the changes requested in Defendant's Exhibit No. 51.)

A. That is what those two columns were intended to cover.

Q. Now, Mr. Hulcy, during the calendar year of 1934 has the Lone Star Gas Company purchased any pipe?

A. I think there have been a few purchases,—no, I don't believe the Lone Star Gas Company has purchased any pipe; I can refer to the records here and tell you. (Refers to data.)

Q. Have any of the affiliated companies purchased any

pipe during the calendar year of 1934?

A. The Lone Star Gas Company has not purchased any pipe in 1934. However, the Municipal Gas Company, the Community Natural Gas Company, and the Lone Star Gasoline Company have purchased pipe and/or casing through the Pittsburgh Office during the year 1934.

Q. Were those purchases in large or small lots?

A. Purchases of small lots.

Q. At what prices were those purchases made?

A. They were made at the quoted prices.

Q. Current as of the time the purchase was made?

A. Yes, sir; that is currect; current with posted or quoted prices as of January 2, 1934.

Q. Are those purchases rather extensive?

A. No, sir; they are not.

[fol. 3489] Q. Will you state what they are, and the prices which were actually paid by the Company for these small lot purchases—or by the companies which you mentioned,

for these small lot purchases in the year 1934?

A. There has been introduced as an exhibit in this case, I believe Defendant's Exhibit 34, which sets out the quoted prices on pipe, effective January 1, 1934, on large lots. Now, I have a tabulation here which shows the quoted prices for both large lots and small lot purchases. The first purchase was for the Municipal Gas Company, purchased from the Frick Reed Supply Corporation, of 2\% inch O.D., 3.652 pounds per foot, plain end lap weld pipe. The quoted price for that particular pipe net is \$13.97 per hundred lineal feet for large lots.

Q. Is that shown on page 1 of Defendant's Exhibit 34?

A. Yes; it is. The corresponding price for small lot purchases is \$15.17. Under date of March 2nd, the Municipal Gas Company purchased 2000 feet of this particular pipe at a price of \$15.23 per hundred lineal feet delivered. That was subject to one-half of one per cent cash discount on the mill value, and the one-half of one per cent cash discount applied to the \$15.23 price, brings it back to exactly the same as the quoted price delivered for that size and weight pipe. The Municipal Gas Company also purchased under date of April 20, 1934, 8,000 feet of 41/2 inch O.D., [fol. 3490] 10.790 pounds, plain end lap weld line pipe. By referring to page 1 of Exhibit 34, the large lot quoted price is \$35.58 per hundred lineal feet; the corresponding price for small lots is \$38.51. The price paid by the Municipal Gas Company for that particular pipe delivered is \$38.66, and one-half of one per cent cash discount applicable to the mill value, is the same as the quoted price. 6% inch, O.D., 18.974 pounds, plain end lap weld line pipe, under date of March 7, 1934, the Municipal Gas Company purchased 2000 feet of this particular pipe to be delivered at Denton, Texas at a price of \$68.11; shown on page 1 of Defendant's Exhibit 34, the cash price is \$62.68 per hundred lineal feet. The corresponding price for small lot purchases is \$67.85. \$68.11, the actual price paid by Municipal Gas Company for that particular pipe, when discounted by one-half of one per cent for cash discount, is the same as the quoted price as of that date. Now, I believe that those are typical, Mr. Griffith. There are some purchases of 2% inch pipe, and then there is some casing.

Q. Is it true, without exception, Mr. Hulcy, that in the calendar year of 1934, all pipe purchased, of which you have knowledge, has been purchased at the prices quoted by the mill manufacturers?

[fol. 3491] A. That is correct; and that is so indicated by all of the vouchers I have on these particular purchases of

pipe made in 1934.

Q. Is it your testimony that the prices current and quoted as of 1934 for either large or small lot purchases by the mill manufacturers are not subject to a discount of from ten to fifteen per cent?

A. That is correct.

## Cross-examination.

## Questions by Mr. Fitzhugh:

Q. Mr. Hulcy, on page 20 of the Railroad Commission of Texas' order this language is found: "Mr. Freese in making his appraisal of the Transmission Line Equipment applied to the basic quotations (as of July to December, 1931) the discounts actually obtained by the Lone Star Gas Company as indicated by the last 1931 purchases of carload lots or more of various weights of pipe." Is that correct?

A. That is correct. However, it was not on carloads of pipe—I just read into the record where those prices were based on purchases of 400 feet and up, and it was not on

carloads.

Q. Now, show a purchase of less than carload lot where

Mr. Freese based his price?

A. All right, sir. On the 10-inch, 31.445 pounds, lapweld [fol. 3492] pipe, the price used by Mr. Freese was \$76.93 per hundred lineal feet, and that was based on a purchase of 400 feet under date of November 20, 1931, which was paid for in December, and covered by Lone Star Gas Company-Voucher M-164, at a price of \$76.93, or exactly the same price used by Mr. Freese.

Q. Was that less than a carload shipment?

A. Yes, sir; I would say it is.

Q. Did that come by local freight?'

A. No, sir; I don't think it did.

Q. Can't you look at your voucher and find out? A. That voucher would only cover 10-inch pipe.

Q. It might have been part of a carload, might it not?

A. Might have been; but it was not a part of a carload of ten-inch pipe.

Q. You can't say that that was not part of a carload lot,

can you?

A. No, sir; but it is not a part of a carload of 10-inch pipe. These are the prices, F. O. B. Mill, and it would not make any difference whether they came by express, fast freight,

slow freight, or how.

Q. The language in the Commission's order goes on as follows: "In other words, Mr. Freese used the actual price paid by the Company for its last 1931 purchases of the various weights bought during 1931." Is that correct? [fol. 3493] A. I think that is generally correct. As to purchases made by Lone Star Gas Company, that would be right.

Q. "Where purchases of particular weights were not made during 1931, Mr. Freese applied the discount actually obtained on the last 1931 purchase of the nearest weight."

Is that correct?

A. That is correct. I tried to make that clear in my testimony.

Q. "The effect of Mr. Freese's computation was to use the actual cost of the pipe to the company based upon the

last 1931 purchases." Is that true?

A. Well, of course, while giving effect to applying the same percents that he found on the same particular purchases of pipe, however, that is not true of the 2-inch pipe. There was plenty of 2-inch pipe bought in 1931, and which Mr. Freese did not use at all.

[fol. 3494] Q. How much two inch pipe did you have in

your inventory?

A. I don't know, but I do know that there are several

hundred miles of two inch pipe.

Q. All right, the order proceeds: "The Lone Star Gas Company bought large amounts of pipe in 1929, having purchased a total of several million feet of all sizes of pipe up to and including twenty inch during that year. Basic quotations on pipe were maintained at a constant figure by the manufacturers throughout the year 1929." Is that correct?

A. I am not prepared to say, Mr. Fitzhugh. I was not interested in 1929. I was only interested in the prices used

by Mr. Freese, as compared with the cost prices.

Q. You don't know anything about the 1929 prices?

- A. No, sir.
- Q. Or the discounts?
- A. I do not recall anything about the details of it.
- Q. All right, skipping over the part that applies to 1929, this statement occurs: "The discounts from the 1929 basic quotations were substantially the same on the large amounts of pipe bought during 1929 as were obtained on the relatively small purchases made during 1931." You don't know whether that is true or not, do you?
  - A. No, sir.; I do not.
- Q. The order continues: "Mr. Freese used the same method of arriving at the discounts for threaded and coupled pipe as he used for the larger quantities of plain [fol. 3495] end pipe, i. e., discounts off of the December 31, 1931, quotations were based on the last purchases of each weight made during 1931." Is that correct?

A. Perhaps that is true, Mr. Fitzhugh. I did not tabulate any cases; the only thing I was interested in was the lap weld, plain end pipe.

Q. Then the order says: "In arriving at the discounts to be applied to the December 31, 1931, quotations on electric welded pipe, Mr. Freese based his discounts on a sizeable purchase of electric welded pipe bought in August, 1931. If the pipe actually purchased were seamless pipe, as one witness testified, then the discount off of the higher quoted seamless pipe price would have been even greater." Now you have discussed that purchase, have you not?

A. Yes. That is the sixteen inch plain end electric weld pipe which was actually seamless pipe.

Q. That's the pipe you discussed. Now, is that last statement I quoted to you a correct one?

- A. No, I don't think that is correct at all, Mr. Fitzhugh, for this reason. I think it is very evident on that particular purchase of pipe that the purchase price was not anything like the quoted price or the fair price of the pipe and what they would charge for that particular pipe at all, but it does show that they had a more expensive production hand and which was included in their inventory and they were willing to make concessions in order to move the pipe. That would [fol. 3496] not be the quoted price or the fair value of that pipe at that date at all.
- Q. The order continues with this language: "The Company defended its use of quoted prices by citing instances

where gas distributing companies had paid the quoted prices. The tonnage of relatively small pipe required by the distributing companies cited is not to be compared with the very large tonnage of transmission line pipe, field line pipe, well casing, etc., currently required by Lone Star Gas Company." Do you subscribe to that statement?

A. Are you talking about the application of prices now—do you mean that these purchases made for the distribution companies do not compare with the purchases made by the

Lone Star Gas Company?

Q. As of December 31, 1931.

A. So far as the purchases are concerned, Mr. Fitzhugh, there is just as much and more pipe which was bought at prices in excess of the pipe bought by Lone Star Gas Company, as was the volume of pipe upon which the Lone Star Gas Company prices were based in this particular inventory.

Q. Now this statement occurs: "On the other hand, Mr. Freese cited the actual purchase of 2,221,272 feet of large and small pipe by the Lone Star Gas Company at prices less than the quoted prices by the approximate amount of the

discounts which he used." Isn't that true?

A. I did not hear that testimony. However, that did not [fol. 3497] enter into the calculation of Mr. Freese's prices, because his prices were based on specific purchases in 1931, and we did not have purchases of any such amount of pipe bought in 1931.

Q. Don't you think that a check of 2,221,272 feet of pipe purchases, of all sizes of pipe, would be a pretty good check

on your pipe prices.

A. That is a very sizable amount of pipe.

Q. Now, look at your Exhibit 51; you don't mean to say, do you that any of the prices contained in Exhibit 51 have been applied to the present appraisal by Mr. Freese?

A. No, sir, I do not.

Q. But he has used, just as you have, in the present ap-

praisal, the quoted prices?

- A. My understanding is that Mr. Freese in his appraisal used the quoted prices as at December 31, 1931, and that is—or rather, excuse me—I mean at December 31, 1932, I believe, and his appraisal is dated June 15, 1934. Is that correct?
- Q. But Mr. Freese testified that any increase in pipe prices which he adopted as of the date of your appraisal in

bringing it up to June 15, 1934, was offset by the allowance for omissions and contingencies which he was inclined to disallow?

A. I believe I heard part of Mr. Freese's testimony in that connection, and if I remember correctly he said one of the main reasons he was not giving effect to the increase in pipe prices was because the company always had and did now receive substantial discounts from the quoted prices, [fol. 3498] and as of this date I do not subscribe to that at all.

Q. So you don't know whether Mr. Freese actually used, as of the date of his appraisal, the current quoted price of

pipe or not, do you?

A. I know he did not use the current quoted prices as of June 15, 1934.

Q. You don't know whether the effect of his appraisal was

to do that, or not, do you?

A. Well, that is my understanding—that he did not make any corrections in the prices of pipe used in the company appraisal which was dated January 1, 1933, and so I would assume that he did not use the current quoted prices.

Q. Didn't Mr. Freese testify to this, Mr. Hulcy—that the difference in pipe prices, as between January 1, 1933, and as of June 15, 1934, was approximately \$900,000.00 for the whole system, the part that he appraised?

A. I do not recall that amount, but I do remember there

was a sizable difference in it.

Q. But that the amount for omissions and contingencies would also be in the amount of \$900,000.00, which would exactly offset, so that he made no change?

A. Now, perhaps that was the testimony. I will admit I

was not following his testimony closely all along.

Q. All right now, if that was his testimony, the effect of his appraisal would be to apply just exactly the quoted prices of pipe, just exactly as you did, or as the company did in their appraisal?

[fol. 3499] A. As the Company did?

Q. Yes.

A. Of course, I don't know that the company made an appraisal giving effect to June 15, 1934 prices, but it is my understanding that Mr. Freese used the quoted prices for pipe as of December 31, 1932, or rather, January 1, 1933, and as you state, if he offset or eliminated omissions and

contingencies, and desired to place that on pipe, and he had calculated that \$900,000.00 was the difference in pipe, then Mr. Fitzhugh, I think it would be the equivalent of giving effect to the present quoted prices of pipe, assuming those calculations are as you stated them.

Q. Yes, exactly. Now, can you point out in this Exhibit 51 that you have introduced here, where the Lone Star Gas Company in a single instance paid the quoted prices for

pipe purchased?

A. Most all of the purchases made by the Lone Star Gas Company were in the early part or by the middle of the year. The purchases that I have here shown at the end of the year are the ones made for the distribution companies, and they are—or in a number of instances, they are made at the quoted prices.

Q. There are some purchases that the Lone Star Gas Company made itself that were not more than a month prior to the date of Mr. Freese's appraisal, aren't there?

A. I think there may be possibly one or two scattered through from September on to December, Mr. Fitzhugh.

Q. Well now, just answer my question. Can you show in here, or cite a single instance of any price for pipe appearing in this whole exhibit where your company, the Lone Star [fol. 3500] Gas Company, actually paid the quoted price?

A. Now, this is limited to the Lone Star Gas Company,

that you have reference to?

Q. Yes sir.

A. All right, sir; I will take a look through here and see if I can find you one. No, sir; not at exactly that price. However, on the sixteen inch 47.215 pound lap weld pipe, two purchases were made at a price in excess of the purchase price.

. Q. But in no instance was the exact quoted price paid,

was it?

A. No sir, it was not. This was in excess of the quoted price. However, those purchases were made in the month of February, 1931, and there is no reason why they should exactly check with the quoted prices as at December 31, 1931.

Q. Now, on that sixteen inch pipe, what was the last price

paid by the Lone Star Gas Company?

A. The last price actually paid was \$124.91.

Q. What did Mr. Freese use in his appraisal?

A. \$124.91.

Q. The same price, wasn't it?

A. The same as the purchase in April, 1931, or eight months prior to his appraisal.

Q. It was the one made in May, you mean?

A. It was paid in May. The invoice date was April 24, 1931.

Q. That was the last purchase made before the date of Mr. Freese's appraisal, wasn't it?

A. Yes.

Q. Now, what did the company use in their appraisal? [fol. 3501] A. The company used the quoted price of \$148.72.

Q. Now, how much higher was the price that the company used, over the last actual purchase price of pipe of that same size?

A. The quoted price of \$148.72 is \$23.81 per 100 lineal feet in excess of the actual amount paid for one thousand feet of that pipe in May, 1931.

Q. That \$23.81 difference is a difference of about twenty per cent over the price actually paid, isn't it?

A. Yes, about 19 per cent.

Q. Now, does the company usually get a better price on large purchases of pipe, or on small purchases of pipe?

A. I don't know, Mr. Fitzhugh, just which of them they would get the better price on. Of course, all of that is determined by whether or not the pipe is on hand. I would say if you were going to make purchases of larger sizes of pipe and large lots of pipe, you would come nearer to paying the quoted price than you would on some small scattered prices on small pipe. That means the mill would have to be set up ready to run, for the larger quantities, and the other means that they might have it in their inventory on hand and would like to move it out, just as any other merchant likes to move his merchandise.

Q. This purchase was on 1,000 feet of pipe?

A. On the 16 inch?

Q. Yes, the purchase made in May, 1931?

A. Yes.

Q. To which you applied a price of \$124.91 per hundred feet?

A. That is the price paid by the company.

[fol. 3502] Q. Now, if your company had been buying, instead of the one thousand feet of sixteen inch that they

actually purchased, enough of this sixteen inch pipe to reproduce all the sixteen inch of this weight in the company's system, wouldn't you have gotten a lower price than the \$124.91 per hundred feet as actually paid?

A. No sir, I certainly don't think so. The pipe people would just go out of business right quite on setting up their mill to run and turning out large volumes of pipe on any

such a basis as that.

Q. Aren't you familiar with the fact, Mr. Hulcy, that the current quotations of pipe for large lots are substantially less than the current quotations for the very same pipe, when bought in small lots?

A. That is correct; it is at the present time, yes.

Q. And it has always been that way, hasn't it, Mr. Hulcy?

A. No, I don't know that that is correct at all, because I know these small lots have been purchased in some cases at less than the quoted prices. Larger lots of pipe of the same size and a little bit later, while the quoted price was the same, are purchased at prices equaling the quoted prices.

Q. Nevertheless, in each case where your company has purchased pipe at less than the quoted price, ever since the time this rate investigation first started, you have had some

excuse for it haven't you?

A. Yes, I certainly have had some excuse for it. There

has been a reason.

[fol. 3503] Q. And in each case you have claimed that those were distress purchases, or purchases of distress pipe?

A. Mr. Fitzhugh, a large part of the pipe that has been purchased since 1931, along in there, has been at distress prices; there is no question that, and of course that is not limited to the pipe mills alone—that also applies to other lines of business.

Q. And I suppose, following the same reasoning, Mr. Hulcy, where the quoted prices now, for purchases in large lots, are less than the quoted prices on small lot purchases, you would still say that the purchases on large lots would be distress prices, wouldn't you?

A. No, sir; I would not say they would be distress. I think it is clearly set out whether you are purchasing small

lots or whether you are purchasing large lots.

Q. All right now, take the firs size of pipe that shows

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in your exhibit; the price that you have included in Mr. Freese's price column is the price he applies to lap weld pipe?

A. Yes, that is the price which he has applied to the lap

weld pipe.

Q. And the purchase prices you have compared with Mr. Freese's price are purchases of butt-weld pipe?

A. No; sir; they are lap weld pipe. We have practically

no butt-weld pipe in our system.

Q. What do you mean, then, by including underneath your gross and net in the quotation FOB mill column (1369) and (1341)?

A. Those are the gross prices, both the gross and the net [fol. 3504] for two inch lap weld pipe. The company in the preparation of their appraisal made an error and used the quoted price for butt-weld pipe, which is \$11.35 gross and \$11.12 net.

Q. As compared to Mr. Freese's price of \$9.70.

A. Yes, and I explained this morning, Mr. Freese arrived at his price of \$9.70, not basing it upon any purchase made by the company, but that they did purchase over 37,000 feet of two inch lap weld pipe in 1931; but that his price was based upon one single purchase of four inch pipe in 1931, and that he had arrived at a discount of 12.78 per cent, and he applied that discount to the price which was used by the company in error as applying to two inch lap weld pipe, and he therefore arrived at a price of \$9.70, whereas the lowest price paid in 1931 by the company was \$12.01.

Q. So you say that both the company and Mr. Freese

were in error on those prices?

A. Yes, the company used a butt-weld price, which is cheaper than the lap weld.

Q. All right, take the next size of pipe.

A. Yes, sir.

Q. The three inch. What was the last purchase made by the Lone Star Gas Company of three inch in 1931?

A. The last purchase of three inch made in 1931 by the Lone Star Gas Company was six thousand feet, in August, at a price of \$16.27.

Q. Now, what price did Mr. Freese use in his appraisal on this same size?.

[fol. 3505] A. \$16.27.

Q. What did the company use in its appraisal?

A. \$24.58.

Q. What is the percentage of difference?

A. You want the percentage of what?

Q. I want to know by what percentage is \$24.58 higher than the price actually used by Mr. Freese of \$16.27 per hundred feet of three inch pipe?

A. It is approximately fifty per cent.

Q. In other words, the company used a price of fifty per cent over what it paid on the last purchase in 1931?

A. That is correct.

Q. Take the next size of pipe, the four inch. What was the last purchase of pipe of this size made by the Lone Star Gas Company in 1931?

A. The last purchase in 1931, of the four inch, was in November, 1931, at a price of—

Q. Aren't you mistaken? Wasn't it in August, 1931?

A. Well, yes, you are correct. There was only one purchase by the Lone Star Gas Company of that particular size of pipe; you are correct.

Q. In August, 1931?

A. That is correct. I was looking at the Community Natural Gas Company.

Q. That was some four or five months before the date of Mr. Freese's appraisal?

[fol. 3506] A. Yes.

Q. Now, what price did Mr. Freese use—he used the same price, didn't he?

A. Yes.

Q. As against that which the company used, of \$26.52 per hundred feet?

A. Yes, that is correct.

Q. And again the company used higher than the actual purchases of such pipe in 1931 by the Lone Star Gas Company?

A. If you restrict this to 1931, yes, for the Lone Star Gas Company, but the purchase was made through the same

source as the other.

Q. Now, the next size is six inch?

A. Yes, that is correct.

Q. What was the last purchase by the Lone Star Gas Company of six inch in 1931?

A. The last purchase by Lone Star Gas Company in 1931 was in December, 1931, where they purchased six thousand feet at a price of \$44.10.

Q. That was almost at the very date of Mr. Freese's ap-

praisal, wasn't it—the same month?

A. Yes, the invoice date was November 20, 1931, and the pipe was paid for in December account, Voucher M-164.

Q. Now, that voucher that showed that purchase had not been put on the books of the company at the time Mr. Freese made his appraisal, had it?

[fol. 3507] A. Well now, I don't know. Mr. Freese's appraisal was dat- December 31, 1931; I do not know just. when it was comple- The auditors were there all along.

Q. Well now, Mr. Freese never did see that voucher, did

he, Mr. Hulcy?

A. I don't know whether he did or not.

Q. Don't you know the voucher wasn't in the company records and a part of the company's records when Mr.

Freese made his investigation?

A. I don't know when he made his investigation. I understood Mr. Freese to say these prices were furnished to him by his auditors, or the auditors of J. A. Phillips & Company. The auditors or the employees of J. A. Phillips & Company have been in the Lone Star Gas Company's office for a good long time, and whether they saw this actual voucher or not, I don't know, Mr. Fitzhugh.

Q. All right. Anyway, Mr. Freese used the same price

in his appraisal as appears on that voucher, didn't he?

A. No, sir. The last purchase was in December, 1931. Mr. Freese used the same price as was paid by the company in July of 1931 which was \$40.82 per 100 lineal feet, but the last in December of 1931 was not used by him. The one he used might have been the last one he saw.

Q. Now, the company used in its appraisal a price of \$46.84 per hundred feet, as in contrast to the price which Mr.

Freese used?

[fol. 3508] A. That is correct.

Q. Now, the next size of pipe is eight inch?

A. Yes.

Q. In July, 1931, the company was buying this size of pipe for \$56.84 per hundred feet?

A. Yes. They bought three thousand feet in July and

August, at a price of \$56.84 per hundred feet.

Q. And the same price prevailed in August as in July?

A. Yes.

Q. And that is the same price Mr. Freese used in his appraisal, isn't it?

A. Yes, that checks with the price that Mr. Freese used in

his appraisal.

Q. As contrasting with the price of \$56.84 used by Mr. Freese in his apraisal, and as actually being paid by the company, the company put in its appraisal a price of \$64.06 per hundred feet, didn't it?

A. Yes, that was the quoted price on that pipe as at

December 31, 1931.

Mr. Griffith: And it was also the price actually paid in September, 1931, by the Municipal Gas Company, wasn't it?

A. Yes, it was.

Q. Well, these smaller companies always pay the quoted

prices, don't they?

A. No sir, I wouldn't say that, Mr. Fitzhugh. The quantity of this pipe that we are talking about on the Lone Star [fol. 3509] Gas Company purchase was three thousand feet, two thousand feet of it purchased in August, and one thousand feet in July. This other purchase we are talking about is eight thousand feet, and when that mill makes a price on that pipe, they don't know whether it will be for the Municipal Gas Company, the Lone Star Gas Company, or who.

Q. They don't, huh?

A. No. Mr. Simpson just puts in the order.

Q. Well, then, turn back on your first page there.

A. Yes.

Q. Can you point out an instance there on page 1 or page 2, Mr. Hulcy, where purchases were made by the Lone Star Gas Company and any of these distributing companies at about the same date where the same price was paid?

A. Well, I don't know whether I can or not, Mr. Fitzhugh.

I will take a look, though, for it if you want me to.

Q. All right.

A. On two inch pipe, in the month of May, 1931, the Lone Star Gas Company purchased eight thousand feet.

Q. Where are you now?

A. On the two inch pipe, on the first page. That was in May, 1931, when the Lone Star Gas Company purchased eight thousand feet of it, at a net price of \$12.25. Now in the month of May 1931, the Municipal Gas Company purchased

5,000 feet of the same size and weight of pipe, for delivery at Hillsboro, Texas; at a price of \$12.25 per hundred feet, or [fol. 3510] exactly the same price paid by the Lone Star Gas Company.

Q. All right now; June 15, 1931, the Lone Star Gas Company bought it for a net price of \$12.01 per hundred feet,

didn't they, Mr. Hulcy?

A. That is correct, they did.

Q. Now how do you explain that purchase at \$12.01 per hundred feet, where they bought three thousand feet, as compared with the Municipal Gas Company's purchase of five thousand feet of the same size pipe at \$12.25?

A. Well, sir, you are talking about different dates, there. This purchase I referred to was in May, and the Lone Star Gas Company purchase I referred to was in May, and now

you are talking about June 15th.

Q. Well, there wasn't any difference in the quoted price as of those times, was there?

A. I don't know, Mr. Fitzhugh.

Q. Wasn't the same quoted price prevailing?

A. I don't know.

Q. As of those two dates?

A. I could not tell you, sir. The only quoted price I know anything about was the quoted price at December 31, 1931.

Q. All right now, go on to the twelve inch.

A. That was all of those prices that you wanted me to look for—that is, those that were the same?

Q. Well, you haven't found any others, have you?

A. It takes a little time to go through these. I will be [fol. 3511] glad to look for them, if you want me to.

Q. Take your time-take your time. Look hard.

A. I am only trying to do what you wanted there, Mr. Fitzhugh, that's all. It may be that is the only one.—I think that is about all of that I see. The dates don't very well check up. Most of the purchases of the Lone Star Gas Company seem to be, as I said before, in the first half and along about the middle of the year.

Q. So the only purchase you can find a date to compare the prices with, as to these distributing companies and the Lone Star Gas Company prices, is on these two inch stuff, which is a very insignificant item in the system of the Lone Star Gas Company, is it not? A. When compared with twenty inch, it is not very much, no sir.

Q. Either in size or in price?

A. Well, it is considerably less than the twenty inch, too. [fol. 3512] Q. Now, take the 12-inch.

A. Yes, sir.

Q. The last purchase of this pipe was in November, 1931?

A. That is correct.

Q. At a price of \$98.00 per 100 feet?

A. Net, yes, sir, that is correct.

Q. And that is the price used by Mr. Freese in his appraisal, is it not?

A. That is correct.

Q. Now, what is the price the Company used in their appraisal?

A. \$103.69.

Mr. Griffith: That was the quoted price at the end of the year, was it not?

A. All of these prices are the quoted prices at December 31, 1931.

01, 1991.

Q. Well, the quoted price didn't change on any of these

sizes of pipe during 1931, did it?

- A. I couldn't tell you, Mr. Fitzhugh; it has not been necessary for me to keep up with those things, and, as I have said, the only quoted price I was interested in was the quoted price at the dates these appraisals were made. Now, whether it changed on November 15th, or any other date, I don't know.
- Q. Now, on this 16-inch pipe, the last purchase, I believe you say, was at \$124.91? [fol. 3513] A. Yes, sir, that was purchased—the invoice
  - Q. And the price used by Mr. Freese was that price?

A. Yes, sir, that is correct.

was dated on April 24, 1931.

Q. As opposed to the Company prices used in its appraisal of \$148.72 per 100 feet?

A. Yes, sir, which was the quoted price at December 31,

1931.

Q. Now, the 18-inch plain end, seamless, the last quoted price was the price used by Mr. Freese, was it not?

A. You mean the last quoted price or the last purchase price?

Q. The last purchase.

A. Yes, that was the only purchase in 1931, Mr. Fitz-hugh.

Q. That purchase was made in September, 1931, was it

not?

A. That is correct.

Q. The price used by the Company, and contrasted with \$143.42 per 100 feet, is \$179.91 per 100 feet?

A. Yes, sir, which was the quoted price at December

31, 1931.

Q. In other words, the price used there was about 35 per cent higher than the last purchase?

A. You mean the only purchase.

Q. Yes, sir; or \$35.00, I mean. I said 35 per cent, I believe.

A. Yes, sir; \$36.00.

Q. Or stated as a per cent, it would be about 25 per cent, would it not?

A. Yes, sir, 25 per cent, plus.

[fol. 3514] Q. Now, the only sizable purchases that you have got in this whole exhibit are the two purchases of 16-inch made in August, 1931, totaling 36,800 feet?

A. Those are the major purchases in 1931—that is of

any particular sized pipe.

Q. The actual price paid on this purchase of pipe was \$143.39 per 100 feet, was it not?

A. That is correct.

Q. But the price actually used by the Company in its appraisal was \$161.53 per 100, was it not?

A. That was the quoted price at December 31, 1931.

Q. Now, that is the last size of pipe you actually had purchases on?

A. That is correct; there were no purchases on the 18

and 20-inch, plain end, electric welded pipe.

Q. When you first started out your testimony, Mr. Hulcy, you testified something about the legal expenses of the Northern Natural Gas Company.

A. Yes, sir, I did.

Q. What was the legal administration actually experi-

enced by the Northern Natural Gas Company?

A. I don't believe I testified about that, Mr. Fitzhugh. I was testifying particularly about the comparison of legal and administrative expenses under wholesale con-

struction and piecemeal construction carried on by an operating company.

[fol. 3515] Q. Well, you wouldn't object to a comparison

of the other overheads, would you?

A. No, sir, I wouldn't object to anything that I would be able to tell you about—that is, at this time.

Q. All right; what was the amount of actual taxes dur-

ing construction?

A. I couldn't tell you, Mr. Fitzhugh; but we did have some taxes during construction on a part of the—I recall very distinctly on a part of the line being constructed in Iowa, that that line was started in the early part of the year 1930; I have particular reference to the line being extended on up from the Missouri River on up to Mason City. Now, there were taxes involved in that, during a construction period.

Q. Well, now, pick out some State that has got a tax system something like we have. Iowa is different, isn't it?

A. Well, sir, I don't know whether it is or not, Mr. Fitz-hugh. I do know that we did have some taxes up there during a construction period.

Q. Do you know how much they were?

A. No, sir, I couldn't tell you now.

Q. It was a very insignificant amount, at any rate, wasn't it?

A. Well, our taxes were sizable up there. That was a new line of business for those people up there in that part of the country, and they believed in getting what they could.

[fol. 3516] Q. Yes. What was the interest during construction on that line?

A. Well, I don't know just of any particular line, Mr. Fitzhugh, but the interest during construction was at six per cent.

Q. Six per cent of what?

A. Six per cent per annum from the time that the project started.

Q. You mean you borrowed money at six per cent?

A. Yes, sir, we borrowed money at six per cent, plus this bonus that was paid. Now, that was paid by the top company.

Q. I want to know what is the amount that you capitalized on the books for interest during construction on that

construction work.

A. Well, I didn't bring those books of the Northern down here, Mr. Fitzhugh. If I had known that you wanted that, I would have been very happy to have done it, because I do believe that we have accurate records on the books of exactly what the costs are.

Q. Now, you are the Secretary, Comptroller and Treas-

urer of that line, aren't you?

A. Not the Treasurer, just the Secretary and

Q. And Comptroller?

A. Yes, sir.

Q. Wouldn't you be apt to carry those figures in your [fol. 3517] head, Hulcy, on such an important construction

job?

- A. Well, Mr. Fitzhugh, they are only included—in that group there are about twelve companies, and there are seventeen in the Lone Star group. I used to try to carry figures in my head some, but I found it didn't pay. I sometimes found that was wrong about figures; therefore, I quit trying to remember them.
- Q. Incidentally, the Lone Star Gas Company did all of that construction work, did they not?

A. No, sir, they certainly did not.

Q. They loaned their construction gang for it, didn't they?

A. No, sir, they did not.

Q. There are not any entries on the Lone Star Gas Company's books for the construction work of the No-thern

Natural Gas Company?

A. They built a few pipe line bridges and two compressor stations, but that is all. They had nothing to do with the construction of the transportation system from Texas to Minnesota and South Dakota.

Q. There are entries appearing on the Lone Star Gas. Company's books with which you are well familiar, aren't there, Mr. Huley—

A. Yes, sir, I am familiar with them.

Q. —that show payments to the Lone Star Gas Company

[fol. 3518] for work done on the Northern Natural?

A. Yes, sir, just as I testified, that was in connection with the construction of two compressor stations and certain pipe line bridges, but had nothing whatever to do with the construction of the transportation system.

Q. And the books of your Company show that for that

work the Lone Star Gas Company got \$200,000.00, which it passed on then to the Lone Star Gas Corporation?

A. Yes, sir, about that—something less than two hun-

dred thousand.

Q. And for which \$200,000.00 the Lone Star Gas Company never got any credit at all in its operating statements as revenues?

A. No, sir, they didn't; they were not entitled to it.

Q. Now, all you can remember about the whole Northern Natural proposition is that the legal expense was about

\$400,000.00, or one per cent?

A. Well, the \$400,000.00, I believe I stated this morning, Mr. Fitzhugh, that that was for the year 1930, for the year 1931, and part of 1932. Now, at that time the property account was not up to \$40,000,000.00. There have been extensions made.

Q. Well, how do you know it was one per cent, then?

A. I don't know that it was one per cent. I am talking

[fol. 3519] about the amounts that were capital-

Q. At the end of the period at which you to- — \$400,000,00 off of the books for the legal ex- — what was the amount of the property account?

A. I can't tell you, Mr. Fitzhugh. I just had in my files the legal expenses that had been capitalized up to that time. I have forgotten now what was the reason for getting that information.

Q. So that the legal expense is bound to be based on less than a forty million dollar property account and less than one per cent. I was wrong in my one per cent, wasn't I?

A. Well, it would be in excess of one per cent, then, if you get down less.

Q. Yes, a little more than one per cent.

A. It just goes the other way, you see.

Q. That is right—that is right.

A. Yes, sir.

Q. In making your valuation of leaseholds, you deducted all of the gas well equipment, did you not?

A. Yes, sir, I did.

Q. And all operating expenses by future years?

A. Recovery costs, you have reference to?

Q. Yes, sir.

A. Yes, sir, I do.

[fol. 3520] Q. Those might properly be called operating expenses, might they not?

A. Recovery costs of operating expenses, whichever you

prefer to call them; either one.

- Q. Now, you objected, if I caught the force of your testimony, to the elimination of those same expenses by Mr. Freese?
  - A. In this Exhibit 8?
  - Q. In his Exhibit 8.

A. I certainly would object to it, Mr. Fitzhugh. They were expenses that were actually incurred by the Company, and so found by the auditors for the Commission.

Q. Well, now, if you were willing to eliminate and deduct all of the operating expenses in your calculation, why do you

object to Mr. Freese doing the same thing?

A. Well, I will tell you,—you never did find me coming up with a profit and loss statement with these items eliminated, Mr. Fitzhugh. I was arriving at a value of property, and it has no connection whatever with profits and losses.

Q. Well, the way Mr. Freese worked it out, he was doing

the same thing.

A. No, sir, he was not. He was talking about revenues and expenses, and I was arriving at a present fair value or [fol. 3521] present worth, if you please, of the gas reserves of the Company, and profit and loss statements had no place in any such exhibit which I sponsored here.

Q. Mr. Hulcy, didn't you allow in your computation the full well-head price for gas at the field, even in increasing

amounts through the years?

A. Yes, sir, in arriving at my values, yes; not in any profit and loss statements, Mr. Fitzhugh. It seems that we are talking about two entirely different things.

- Q. Well, Mr. Hulcy, do you understand how this whole thing works out, as Mr. Freese has described it in his testimony?
  - A. In connection with the production system property?

Q. I say in connection with-

- A. I didn't hear Mr. Freese's testimony in connection with that.
- Q. In connection with taking care of the proper consideration for gas reserves.

A. No, I didn't hear him testify about that, Mr. Fitzhugh.

Q. Well, you don't know, then, do you, that his proposition has nothing to do with a profit and loss statement or with a balance sheet?

A. Mr. Fitzhugh, I do know, though—from this exhibit I [fol. 3522] know that he has eliminated over four millions of dollars of property; I know that he has eliminated \$232,000.00 of operating expenses.

Q. Just take that four hundred millions of-

A. Four hundred million or four million?

Q. All right, four millions of property you are talking about.

A. Yes, sir.

Q. Didn't you eliminate the same property in your valuation, as it was worked out, over-all?

A. No, sir, I did not; no, sir.

Q. You took it out of your valuation-

A. Yes, sir; I said—

Q. —of gas reserves.
A. I said that the gas producing properties were the net value of the gas reserves—

Q. And Mr. Biddison-

- A.—were worth the net value of the gas reserves, plus the equipment used; and it is just as broad as it is long, whether you don't include them all or whether you deduct them all.
- Q. Well, the way your valuation works out, after all you fellows finally get together—you and Mr. Steinberger, and Mr. Biddison, and all the others that got into this thing,—after you come to the net result, don't you have a complete [fol. 3523] and absolute one hundred per cent elimination of the gas production equipment?

A. Well, it wasn't necessary to get together with anybody on that. All I wanted was the figure that was included in their appraisal for gas well equipment and construction, and

that is the amount.

Q. Just answer the question.

A. No, sir, I didn't get together with anybody.

Q. Well, disregarding the getting together feature of it,—haven't you ended up with the whole thing eliminated?

A. I deducted from my gross value the gross recovery value.

Q. Every penny?

A. That they had in there for gas well equipment and gas well construction.

Mr. Griffith: Mr. Biddison evaluated gas well construction and gas well equipment, didn't he?

A. Yes, sir, he did.

Mr. Griffith: And it is included in Defendant's Exhibit 28?

A. Yes, sir, it is.

Q. And that is the exact amount you took out, too, isn't [fol. 3524] it?

A. Yes, sir, it is.

Q. So you just washed out?

A. No, sir, I didn't just wash out, Mr. Fitzhugh, at all.

Q. Well, if you put it in—if you take out and Mr. Biddison

puts it in, where have you gotten?

- A. Mr. Fitzhugh, the gas well equipment, gas well construction and gas reserves have a value. They are all included in the appraisal. I arrived at a figure, which I consider is the present fair value as at January 1, 1933, of the gas reserves owned by Lone Star Gas Company at that date, and, as I stated on my direct testimony, it was a mathematical calculation of the withdrawal value of property owned by the Company at that date.
- Q. All right. Now, Mr. Hulcy, I believe you have testified heretofore that your gas is not worth any more than somebody else's gas in the same field?

A. I said that I assumed that, Mr. Fitzhugh. However, I did point out several reasons why it should be worth more, and why I thought I was treating it mighty conservatively.

Q. All right. Now, Mr. Freese, in his computation, allowed the full well-head price at the prevailing field price in every case, did he not?

[fol. 3525] A. Well, that is my understanding that he did.

Q. And for every cubic foot that was actually withdrawn

for the period stated?

- A. Well, now, my understanding is that that was based upon the deliveries—that is, by quarters. Of course, I didn't have the necessary information to check that all the way through, but I am sure that Mr. Freese was right—that is, in his calculations: I know of no reason for saying that they were not correct.
- Q. Now, when you buy gas from another owner at the prevailing price in the field—

A. Yes, sir.

Q. —you don't have to pay that owner for a return on his investment, depreciation, dry hole expense, canceled and

surrendered lease expense, and all these other things, in addition to the price you pay him for his gas?

A. We usually pay him one price, which includes the cost

of delivering the gas to us at the well-head.

Q. You don't have to pay any operating expenses to get that gas to the well-head, do you?

A. Not to get the gas to the well-head, no, sir; that is the

producer's expense.

Q. And the prevailing price that you pay the owner covers [fol. 3526] all those things?

A. That is correct; and it should cover them.

Q. Now, if Mr. Freese goes on the same assumption that you have already made of considering your gas worth just the same as other owner's gas, why hasn't he been absolutely

fair and just to you in every way?

A. Why, he has not been fair and just at all in the preparation of that exhibit, Mr. Fitzhugh, I don't think. I think right on the face of it, Mr. Fitzhugh, as I just stated, that when you eliminate over four million dollars worth of property owned and used and useful to the Company, and that when you deduct operating expenses that were actually incurred, and when these operating expenses alone are in excess of the total credits that you allow,—when you say that is fair and just, I can't follow you, that's all.

[fol. 3527] Q. Mr. Hulcy, of the amount for operating expenses, which you say should not be eliminated in getting the gas to the well head, how much would be for cancelled and surrendered lease expense?

A. Included in the amount of \$232,758.70 which I read into the record, of that amount \$176,139.67 is set out to cover cancelled and surrendered leases as shown on page 1 of

Plaintiffs' Exhibit No. 4.

Q. In other words, about 75 per cent. of that amount is cancelled and surrendered lease expense?

A. Yes, sir, 76 per cent.

Q. When was that money actually paid out, Mr. Hulcy?

A. I couldn't tell you when the cash was actually paid out on that, Mr. Figzhugh. That represents the value of an asset that was written off in the year 1933.

Q. And which expired some fifteen or twenty years ago,

no doubt; did it not?

A. No, I don't think so. I don't think there are any leases included in that amount. I would say that all of these amounts, generally speaking, would be under five years. The only way a lease could be held for a period of twenty years usually would be through production, and any lease cancelled and/or surrendered on which we had secured production would not be charged to cancelled and surrendered leases; that would be charged against the reserve for depletion.

[fol. 3528] Q. Now, wasn't this an amount—wasn't this amount of expense an expense that was incurred in the development of about four billion cubic feet of gas reserves?

A. This had absolutely no connection whatever with the

development of gas reserves.

Q. Why do you have cancelled and surrendered lease ex-

pense?

A. Well, that is caused by the fact, Mr. Fitzhugh, that the company sees fit and does purchase leases, and naturally all of the leases purchased by the company are not found to be good.

Q. Yes, sir.

A. Therefore it is necessary that the investment be relieved of this asset which has been placed upon the books through the cash expenditures of money, and as they are cancelled and/or surrendered that amount is charged as an operating expense; and this is the amount that Mr. Phillips in his Exhibit No. 4 has shown to be applicable to Texas operations or Texas properties.

Q. Can't you say, Mr. Hulcy, that cancelled or surrendered lease expense or cancelled and surrendered leases are just a sort of by-product in the development of gas reserves!

A. No, sir, I wouldn't say that at all. I would say that that is an actual expense incurred by the company. There is only one place to put it, it is gone, you don't have it, there are no reserves, there isn't anything else accrued on it, and the only place you have got to charge it is to expenses and [fol. 3529] the classifications used by the company have provided for that to be charged to operating expenses, and that has been done.

Mr. Griffith: You mean it is a classification of accounts.

A. Yes, sir, I do.

Q. Now, the company buys leases from time to time, don't they?

A. Yes, sir, they do.

Q. They develop those leases?

A. Some they do and some they don't.

Q. Some turn out to be bad ones and some turn out to be good ones?

A. Yes, sir.

- Q. Now, don't you think, Mr. Hulcy, it is unfair to charge public service operations with the expense of getting all of those bad leases that are later charged off as cancelled and surrendered leases expense, unless you at the same time credit those public service operations with the increased value or the enhanced property value due to the development of some of the leases into good paying properties and into good gas reserves?
- A. Now, if I follow your question, I will answer it to the best of my ability, Mr. Fitzhugh. As I stated a while ago, I don't think that cancelled and surrendered leases have any connection whatever with the value of gas reserves. As I stated, that is an operating expense which necessarily must be charged to expenses. The value placed on the gas [fol. 3530] reserves at any given date does not necessarily mean the enhancement in value. It also takes into consideration the doubled value of any particular lease which is included therein, and, of course, it does not give any consideration whatever to whether the final answer is in excess of the amount carried on the books or is below the amount carried on the books.

Mr. Griffith: By the term "carried on the books", you mean the actual cost of the property is carried on the books?

A. That is correct, yes, sir.

Q. Now, this four million four hundred thirty-two thousand dollars worth of property was the value of the gas producing properties, wasn't it?

A. Yes, sir, as shown on page 11, Plaintiffs' Exhibit No.4—with the exception of such gas producing property as is

included in the Petrolia field.

Mr. Griffith: It is cost rather than value, isn't it, Mr. Hulev?

A. That is correct, too. This is the cost as reflected by the books and it is included in the statement prepared by Mr. Phillips.

Q. Why did you eliminate the Petrolia field?

A. Well, sir, the only reason I eliminated that, Mr. Fitz-

hugh, was that I wanted to arrive at a minimum value when I made the calculation which I read into the record this [fol. 3531] morning.

Q. In using your own computations for finding the value of gas reserves didn't you get to the negative value for the

Petrolia field?

A. For the value of gas reserves, yes, sir.

Q. And isn't that the reason-

A. Understand, though, the negative value was not in excess of the property—the producing property—gas well construction and equipment carried for the Petrolia field.

Q. Well, the only reason you eliminated the Petrolia field

is that it is at the present time a worthless field?

A. No, sir, that is not the reason. The main reason I eliminated it was because it was eliminated by Mr. Freese, and, as I said, the figure that I read into the record is a minimum figure; in fact, it does not include any of the net additions made to the gas producing properties for the year 1932 or the year 1933 on down to date in 1934.

Witness excused.

Mr. Griffith: That concludes our rebuttal testimony, if the Court please.

[fols. 3532-3533] Defendant rests.

[fol. 3534] S. W. Freese, recalled by plaintiffs, testified further as follows:

[fols. 3535-3536] Direct examination.

### Questions by Mr. Fitzhugh:

Q. Mr. Freese, there has been considerable discussion in the rebuttal testimony put on by the company of your Exhibit 6. I will ask you, in order to make the matter clear, didn't you accept the quoted prices of pipe current as of the date of your appraisal?

A. Yes, although as far as I can make out, on any sizable purchases of pipe the Lone Star Gas Company has always obtained a discount from the quoted prices of from ten to lifteen per cent or more, and I have the list here with me

for some two million feet of pipe bought in 1929. We have used the quoted prices as of June 15, 1934 in our appraisal. Except on earth work we have used the same prices as set up by the company in their appraisal. Now, in between January 1, 1933, and June 15, 1934, there was an increase in the quoted prices of some \$900,000.00. However, we did not feel that the allowances made in the company's exhibit for omissions and contingencies are in any way justified, and those omissions and contingencies just about offset the increase in pipe prices.

[fol. 3537] Q. Now, after all the points that have been raised here in Cross Examination and what has been said about overheads, are you still satisfied with those just exactly as you have them included in your Exhibit No. 6?

A. Yes; I think those are full and sufficient allowances

for overheads.

Q. The company has had several witnesses to show the rate of attachment of customers on some four lines, I believe, and in several communities. Now, assuming that their data is true in every respect, Mr. Freese, does that have any bearing of the remotest sort upon going value?

A. No. Unless you know the earnings of those particular lines, whether they fully compensate for whatever idle plant there may be, or, more particularly, whether the earnings as a whole were sufficient to give a fair return on the investment in the property, and the history of the company shows that to be so from the beginning, there would be no logical reason for considering idle plant on any line.

Q. It was your testimony on Direct Examination, if I remember correctly, that you had evaluated the properties of the company as a going concern without the addition of

a separate allowance for that item?

[fol. 3538]. A. Yes.

Q. Well, that does represent the way you have treated going value?

A. It certainly does. We have included all overheads and everything necessary to make it a going concern.

Q. You say you have evaluated the properties as a going concern and included the allowances for going value with-

out making separate allowances, even after hearing all the rebuttal testimony of the company's witnesses?

A. The property has been evaluated by me as a fully

going concern.

- Q. Now, Mr. Phillips in his exhibit found a net value, or, rather, found a net amount for the Oklahoma gas, did he not?
  - A. That is correct,

Q. What was the amount that he found?

A. 132,000 cubic feet, approximately.

[fol. 3539] Q. Now, there has been some testimony here seeking to draw some conclusions as to whether that is a net figure or not. I will ask you, Mr. Freese, if you have made an independent investigation of your own with a view

to finding the net figure for the Oklahoma gas?

A. Yes; I have made a check of that figure, and that 132,000 cubic feet is the correct figure for the net amount of gas produced in Oklahoma and used in Texas—and by net amount, if you deduct from the amount of gas purchased and produced in Oklahoma all of the gas used in Oklahoma, whether it comes from Texas or Oklahoma, and then deduct from that the amount of Oklahoma gas that went into storage at Petrolia, you will have 132,000 cubic feet left. In other words, if you simply trade gas between the two states and arrive at the net amount that came into Texas from Oklahoma, it is exactly 132,000 cubic feet—rather 132 thousand thousand cubic feet, or 132 million cubic feet.

Q. Now, Mr. Freese, you heard Mr. Hulcy's testimony, in which he interpreted the effect of your elimination of some four million dollars worth of producing properties of the Company. Now, I will ask you, Mr. Freese, if Mr. Hulcy correctly interpreted what you have done in that

respect?

A. No. What we did do was to allow at the well head [fol. 3540] for every cubic foot of gas produced the prevailing well-head price for the gas—allow the Company just that same price that they paid everybody else. That was intended to include all of the costs which another producer selling it at the same price would include, and was intended to include a return on whatever value there was in the property being used by the producer of that gas, for the production of that gas, just like the well-head price would compensate the other owner for getting it to the well-head and

provide a return on whatever value was in the property itself.

Q. Did Mr. Hulcy understand what you had done in the handling of the operating expenses?

A. Well, I don't know whether he did or not.

Q. Did you include as a part of the operating expenses some 75 per cent for cancelled and surrendered leases?

A. No; I do not include any of the operating expenses in getting the gas to the well-head, any more than if you purchased gas from another owner you would make a separate allowance for any expense he had incurred in cancelled and surrendered leases and dry hole expense in getting that gas to the well-head.

Q. Now, Mr. Freese, did Mr. Connor, in testifying as to the interpretation he placed upon your testimony with reference to annual depreciation correctly interpret your theory on that?

A. No; he certainly did not. In so far as basic mor-[fol. 3541] talities are concerned, this Table 1 is correct, and I think I get a higher computed figure than Mr. Connor's own mortality curve showed. However, when it comes to major removals, what we did was to take an average of the 659 miles of major removals which had occurred during the history of the Company. A large part of those removals came at the very beginning of the Company's history, when their gas fields were not so certainly established and they were changing lines from one place to another. We have allowed the equivalent of 30 miles per annum, or 160,000 feet per annum. It was intended that that should have been allowed from the very beginning, particularly since in the beginning the major pipe removals were higher than now. We started out with that 659 miles, and if you apply it as we intended it should be applied, you would arrive back with the same 659 miles we started with, instead of 320.83. If that correction be made, then the total feet of 3-inch equivalent diameter pipe which would have been allowed for throughout the history of the Company would be almost exactly the amount of 5,854,774 feet which was actually incurred; and that will also throw off Table 5, which is based upon the same erroneous interpretation of our Exhibit 7.

Q. And of the general method that you used in the preparation of Exhibit ??

A. That is correct.

[fol. 3542] Q. Now, the implication made by some of the company's witnesses as to your handling of the annual depreciation allowance as found by you is that you actually assumed that the Company would make use of the fifteen million dollar credit balance in its depreciation reserve! Did you actually do that, Mr. Freese?

A. No. We did not refer to this fifteen million dollars, which has been set aside for the purpose of making these replacements, or to take care of the pipe which is actually worn out in service during the history of the Company. What we did assume was that the Company had actually set aside a sufficient amount, whatever that amount might be, to take care of what had been worn out in the past history of the Company, and the annual allowance we did make is sufficient when taken along with the proper amount of reserve having been set aside to take care of the pipe that is worn out in the past, to make all replacements, and to fully amortize the pipe during its life cycle.

Q. Have you made a study of and reduced to a graphic representation a comparison of the computed mortalities as used by you in your mortality curve, and as used by Mr. Connor in his mortality curve, and as compared with the

actual mortalities?

A. Yes, sir.

[fol. 3543] Q. Will you produce that, please, sir?

A. Yes, sir

Q. And this exhibit prepared by you is entitled "Historic Replacements and Abandonments by Years of Lone Star Gas Company and Curve Showing Calculated Replacements and Abandonments"?

A. Yes.

Q. There appears on that sheet a curve labeled, "Hawley, Freese & Nichols Calculated Replacements and Abandonments"?

A. Yes, sir.

Q. And another curve entitled "Connor's Calculated Replacements and Abandonments"?

A. Yes, sir; that is correct.

Mr. Fitzhugh: We offer this sheet in evidence.

(Thereupon the sheet or graph referred to above was marked for identification as Plaintiffs' Exhibit No. 11.)

Q. Refer to your chart, Mr. Freese. Will you please make an explanation of what you show thereon?

A. The heavy line shows the calculated pipe mortalities

as calculated by me.

The Court: The heavy curve?

A. The heavy curve, yes. The dotted curve shows the mortalities as taken from Mr. Connor's basic mortality [fol. 3544] curve. Now, up through the year 1931, and including the mortalities on Lines "J" and "C", which are represented by the cross-hatched section and the white section, these vertical lines represent graphically the actual mortalities or replacements experienced by the Company during each one of these years. Up through the year 1931 the actual mortalities—that is, the sum total of all these vertical lines, including the mortalities on "J" and "C". equal substantially the computed mortalities as computed both by Mr. Connor and by myself. During the earlier years I show a somewhat higher rate of calculated mortalities, and Mr. Connor shows a somewhat lower rate of calculated mortalities. But up through the year 1931 both curves and the actual experience were all in substantial agreement. Now, however, since these curves were prepard and were submitted before the Railroad Commission, we have had two further years of experience-1932 and 1933, and those have been plotted on this same curve. For the year 1932 I predicted some 62 miles of pipe replacement; Mr. Connor predicted some 85 miles of pipe replacement; and there was actually incurred some 6 miles of pipe replacement. For the year 1933 I predicted that there would be some 69 miles of pipe replacement; Mr. Connor predicted that the replacements would be 100 miles. Now, 'as a matter of fact, the actual replacements have been approximately 471/2 miles.

Q. Is there any other explanation that needs to be made of this chart?

[fol. 3545] A. No; I think that covers it.

Q. Now, there was some criticism by rebuttal witnesses of you, Mr. Freese, for using piecemeal replacement costs. I will ask you if you actually did that?

A. No. What we did, in applying these percentages, was to use the same price for piecemeal construction as was arrived at in wholesale construction. Now, the reason we did that was because the salvage of the old pipe on the

piecemeal construction offsets the additional cost of installing the pipe over the wholesale construction cost; and the way I know that is true is by reason of the fact that for the several past years I have checked the actual charges to the depreciation reserve where these replacements have been actually charged up on the books of the Company, and have found that the wholesale reproduction cost of that pipe, or of those units of pipe as included in the replacements, and as found in both the Company's appraisal, and our appraisal, are in excess of the costs as actually incurred by the Company when the salvage value of the pipe has been taken into consideration.

Q. There was some comment made, Mr. Freese, as to the fact that you had estimated separately the time that would be required in putting together the Company's property into different sections. I will ask you if there was really any difference overall as to the assumption of a construction period as between yourself and Mr. Connor? [fol. 3546] A. There was a great deal of difference in the net results. I got \$1,500,000.00 plus for interest during construction. I don't know what Mr. Connor got. But if Mr. Connor had assumed that each unit of property would go into service, or rather, construction on any unit of property would not be started until there was some hope or promise of that piece of property, or unit of property, being used when it was finished,—then we would have arrived at exactly the same results, because the time periods I have allowed for the construction of each item of property are sufficient to take care of the actual construction time involved in the construction of the different parts of the property.

Q. And you have already read into the record the times that you have estimated for the various types of property?

A. No; I don't think I read that into the record; but the exhibit clearly shows the percentages I have allowed for each item of property, and the explanation which I made before will show just how it is arrived at for each item of property.

Q. For instance, in the matter of Compressor Stations, was that one of the things mentioned?

A. Yes, sir.

Q. How did you handle the time for the building of Com-

pressor Stations in the finding of Interest During Construction?

A. We allowed for a 10-month period for the building of

Compressor Stations.

[fol. 3547] Q. Now, I show you this exhibit of Mr. Hulcy's, on Pipe Purchases, being Defendant's Exhibit No. 51. Do you have a copy of that?

A. Yes.

Q. I will ask you, Mr. Freese, if you use a single price appearing anywhere in this exhibit in your present ap-

praisal?

- A. No. This was with reference to the appraisal presented before the Railroad Commission, and the prices herein used are very substantially lower than the prices used in this appraisal. What we attempted to do at that time was to determine the actual price that the Lone Star Gas Company was paying for pipe, and to use that price as heretofore explained; in this appraisal, we have used the quoted prices, although the Company has always obtained a discount off the quoted price for any considerable amount of pipe construction.
- Q. And where in the columns entitled "Freese's Price F. O. B. Mill", on both sheets of this exhibit, the prices there stated apply only to the prices used by you in testifying before the Railroad Commission about a year ago?

A. Yes; for an appraisal as of date two and a half years

ago.

Q. And where in the columns entitled "Quotation F. O. B. Mill", in each page of this exhibit, I will ask you if those are not about the same as the prices used by the Company [fol. 3548] before The Railroad Commission?

A. They have always used the quoted prices in their appraisals, both before the Railroad Commission and here in this present appraisal.

[fol. 3549] Q. You have stated into the record, have you not, Mr. Freese, some examples of purchases actually made by the company of pipe recently?

A. Yes, the only large purchase which the company has made recently; that is correct.

Q. Since that purchase, has there been any other sizable purchase of pipe that you know of?

A. No.

Q. That would be a gauge of the price actually now being

paid by the company?

A. No, and I must say that although the discount there was some 331/3 per cent, in view of the explanation of that matter which Mr. Schmidt made this morning, I think possibly that was distress pipe prices; whether they would have gotten a ten or twelve per cent discount, I don't know, had it not been for the nature of the transaction he described.

Q. Now, in your Exhibit No. 8, Mr. Freese, where you summarize the effect of the application of a thirty-two cent domestic gate rate, after making corrections to normal temperatures for the years ended December 31, 1933, and March 31, 1934, and where you find that with that correction being made, the return on a rate base or a value of \$40,256,862.39 would work out, for the year ended March 31, 1934, in an amount of 6.74 per cent, and for the year ended December 31, 1933, in an amount of 6.76 per cent, I will ask you if, after hearing all the points raised in this rebuttal testimony, you have changed your opinion as to [fol. 3550] that testimony?

A. There should be a correction of four-hundredths per cent: In other words, from this 6.74 and 6.76, the 6.74 should be corrected to 6.70 and the 6.76 per cent corrected to 6.72 per cent, by reason of the fact that the allowance we had made for current replacements on compressor stations should have been increased. With that exception, or after' having taken that into consideration, we feel that the return set out on page 1 of that exhibit 8 is correct.

Q. And to sum up the whole thing, Mr. Freese, if value is found as you have found it, and if the year is adjusted to make an average year as to temperature, as disclosed on the first page in Exhibit 8, the company, through the year 1933 and 1934 will make substantially in excess of six per cent, will it not?

A. Yes-or rather, through the year ending March 31, 1934, they would have made substantially in excess of six

per cent.

Q. That's all.

### Cross-examination.

### Questions by Mr. Griffith:

Q. That is upon the property as you evaluated it?

A. Yes, and as the company evaluated the physical properties, except for excavation.

Q. And with the exclusion by you of all of the production system property of the company located in the State of Texas?

A. No. We allowed, as to your own production properties, for every cubic foot of gas purchased, or rather, pro[fol. 3551] duced by you, every cent that gas was worth, and every cent that you would pay anyone else, and it was the current and prevailing price in the respective field where the gas was produced.

Q. Did you exclude from your evaluated figure of property, each and every dollar that the company had invested in its production system property in the State of Texas?

A. It is not included as an item in the \$40,256,862.39, but a return on that property is allowed in the \$232,644.75 in the first column, and the \$212,031.46 in the second column on page 1 of Exhibit 8.

Q. Not only that, but in Plaintiffs' Exhibit 8, you actually excluded out of pocket operating expenses, actually paid by the Lone Star Gas Company in its regular operations, in the amount of \$232,000.00, didn't you, covering the production system property for the year 1933?

A. I didn't do any such a thing. Those were not actual out of pocket operating expenses; the actual out of pocket operating expenses were about \$70,000.00.

Q. Didn't cancelled and surrendered lease expense repre-

sent out of pocket expense to the company?

A. In other years; it was expense which might have been involved in connection with the development of the 200 million thousand feet of gas in other years, whereas there was only five million thousand used in that year.

Q. Your responses to my questions have a familiar ring, Mr. Freese. Were you responsible for the questions which [fol. 3552] were propounded to Mr. Huley in that connec-

tion?

The Court: I don't think it would be material; they were asked.

Q. Did you make any historical study or actual study as to the historical attachment of business to major transportation lines as shown in Defendant's Exhibit 48, prepared by Mr. Ed C. Connor?

A: No, the only historical study I made of the company's business was to determine for myself whether the company had made a fair return on its property from the very begin-

ning or not.

Q. So far as you know, is the historical rate of business attachment as set forth in Defendant's Exhibit 48 correct?

A. I think it is correct.

[fol. 3553] Q. Now, Mr. Freese, in any calculation of mortalities as set forth in a mortality curve, will it be found that actual experience of the units will conform exactly to the mortality curve?

A. No, they will not conform exactly to the mortality curve, and I think that is well illustrated by the curve

which I gave to the jury a minute ago.

Q. As a matter of fact, replacements and removals come at irregular intervals, do they not?

A. Yes, they most certainly do.

Q. And all that the curve is intended to show is the general trend of replacements?

A. That is correct.

Q. Now, will you refer, please to page 21 of your Exhibit 6?

A. Yes, sir.

Q. What do you show as the value of the B system, based upon your appraisal?

A. \$3,188,121.55 for the transmission line equipment on

the B system.

- Q. How many dollars out of that \$3,188,121.55 represent going value, going concern value or cost of reproducing the business?
- A. None of the overheads are included in that figure of [fol. 3554] \$3,188,121.55, but that figure, taken together with the overheads, represents the value of that pipe line as a going pipe line.
- Q. Mr. Freese, I want you to take your Exhibit 6, and point out to me where, in connection with any item of prop-

erty, you have allowed so much as one dollar for going value, going concern value or cost of reproduction of the

company's business.

A. Every dollar in Exhibit 6 represents the value of property in a going concern. If it were not a going concern, and if it was not used and useful, it would not be in there.

Q. Mr. Freese, can you identify or segregate a single dollar in connection with any of the property set forth in Plaintiffs' Exhibit 6, and which dollar represents your evaluation of going value, going concern value, or the cost of reproducing the company's business?

A. As I answered your previous question, every dollar in there represents the value of property as part of a going

concern.

Q. Mr. Freese, don't you say in connection with Plaintiffs' Exhibit 6, that this is the cost of the reproduction of the property, the Texas gathering, transmission, compressing and general property?

A. That is correct.

Q. Is that title a misnomer?

A. No.

.Q. Well, if the title is to be taken as it reads, where have you included any allowance for going value, going concern

value or cost of reproducing the business?

A. Mr. Griffith, I have not separately labeled a certain amount of dollars as going value. Every item included in there is property, as part of a going concern. Furthermore, in addition to that, in the operating expenses which we have allowed, we have allowed for the attachment of new business, the securing of new business, advertising expenses, and every expense that would be incurred in the nature of attracting new business and which is one of the things which ordinarily, and which does, go to make up what is known as going value.

Q. Now, we may get to the profit and loss statement, later, Mr. Freese, but please confine yourself to this reproduction cost evaluation at this time. Can you point out to me a single dollar in here or a series of dollars which represents going value, going concern value or the cost of reproduction of the business as distinguished from the cost of reproduction of the property?

A. Not separately labeled as such, no.

Q. If the property of the company were to be reproduced

as of June 15, 1934, and there was no business attached whatsoever, wouldn't your reproduction cost be the same as set forth in Plaintiffs' Exhibit 6?

A. Yes, and that would be true whether it was 100 per cent saturation or whether there was no saturation at all, in view of the history of the company, the way it was actually produced and the way it could be produced from the beginning again. There was no loss of return on idle plant [fol. 3556] during the history of the Lone Star Gas Company.

Redirect examination.

Questions by Mr. Fitzhugh:

Q. Mr. Freese, where you spoke there about saturation, are you making the assumption that Mr. Griffith evidently intended, of no customers? I don't believe that you got his question.

A. Apparently my answer is not clear there. What I did mean to say is this: That in view of the history of the [fol. 3557] company and the way the business was attached or developed, and the way the business could be developed again if it were reproduced, that we have not taken into consideration or had to take into consideration the per cent of saturation.

### Mr. Fitzhugh: .

Q. Now suppose, Mr. Freese, in the matter of the B system, where you found a reproduction value of the amount \$3,188,121.55, that this line had had no customers attached or had no operating personnel to operate it, but was simply laying there as a static line. What value would you have given it?

A. Well, if it was not used and useful, it would not have any value at all, as a part of the public service property of the company.

Q. No value.

Mr. Griffith: The property's reproduction cost would be the same, wouldn't it, Mr. Freese?

A. No, not the reproduction cost new of the used and useful property of the Lone Star Gas Company. We left out of our appraisal the Petrolia Field, because the company was suffering an out of pocket loss every year in that field, and there was nothing but junk value there. We did, however, allow the salvage value of the field line equipment in [fol. 3558] that Petrolia field, for that reason.

Mr. Fitzhugh: And the same concept applies just as well to the individual lines or the B system of the company or any other part of the system as a whole, as to the Petrolia

field, doesn't it, Mr. Freese?

A. Yes, it does.

Mr. Fitzhugh: We rest.

The Court: Plaintiff closes his case.

Mr. Griffith: The defendant rests, if the court please.

The Court: Both sides are through, gentlemen?

Mr. Griffith: Yes.

[fol. 3559] (Thereupon at 5:00 o'clock p. m., Thursday, July 12, 1934, evidence was closed.)

[fols. 3560-3563] Reporter's certificate to foregoing transcript omitted in printing.

[fol. 3564] PLAINTIFFS' EXHIBIT No. 2

IN THE DISTRICT COURT OF THE UNITED STATES FOR THE WEST-ERN DISTRICT OF TEXAS, AUSTIN DIVISION

In Equity. No. 467

LONE STAR GAS COMPANY, Plaintiff,

VS.

RAILROAD COMMISSION OF TEXAS et al., Defendants

On this 11th day of November, A. D. 1933, came on to be heard the application of Lone Star Gas Company, plaintiff for an interlocutory injunction in the above styled and numbered cause, before a court of three judges duly called

and assembled pursuant to the provisions of Section 266 of the Judicial Code of the United States, as amended. Whereupon the defendants Lon A. Smith, C. V. Terrell and E. O. Thompson, the members of and constituting the Railroad Commission of Texas, and James V. Allred Attorney General of the State of Texas, presented a motion for stay of

proceedings herein; and

It appearing to the Court from the motion of the said defendants for stay of proceedings herein, that the said defendants together with the State of Texas had as plaintiffs instituted a suit against Lone Star Gas Company, the plaintiff herein, as defendant in Docket No. 53033 in the Fifty-third Judicial District Court of Travis County, Texas, to restrain and enjoin the violation by Lone Star Gas Company of the terms, provisions and requirements of an order, [fol. 3565] Exhibit A in plaintiff's bill of complaint herein, entered by the Railroad Commission of Texas on September. 13th, 1933, fixing and prescriving rates to be charged for natural gas and natural gas service by Lone Star Gas Company at the city gates of numerous towns, cities and communities in the State of Texas and that such suit involves the validity of said order of the Railroad Commission of Texas: and

It further appearing to the Court from said motion to stay all proceedings herein, that upon a motion of the State of Texas and the defendants herein, Lon A. Smith, C. V. Terrell and E. O. Thompson, the members of and constituting the Railroad Commission of Texas, and James V. Allred, Attorney General of the State of Texas, filed by them as plaintiffs in said cause No. 53033 on the docket of the Fiftythird Judicial District Court of Travis County, Texas, the said State Court did on the 5th day of October, 1933, enter an order staying all proceedings against the plaintiff herein, Lone Star Gas Company, either under the terms, provisions and requirements of the Railroad Commission's said order of date September 13th, 1933, or under the rules and regulations of the Railroad Commission of Texas or under any law of this State, pending the final determination of said suit in the Fifty-third Judicial District Court of Travis County, Texas, and which said stay order restrains the Railroad Commission of Texas, the individual members thereof, the attorney General of Texas and all other officials and employees of the State of Texas or of the Railroad Commission or of any other State department, and all other

persons, from instituting or prosecuting any proceeding [fol. 3566] against plaintiff herein, Lone Star Gas Company, under said order of said Railroad Commission; or from attempting to enforce the duties, obligations and requirements imposed upon plaintiff herein by said order or by the rules and regulations of the Railroad Commission of Texas, or by any law of this State, whether by suit for mandamus, mandatory injunction, injunction, penalties, damages, quo warranto, forfeiture or receivership, pending a decision by the said Fifty-third Judicial District Court of Travis County, Texas, of the constitutionality of said order; and restraining all said State officials and departments and their employees and all other persons from enforcing or attempting to enforce the provisions of said order against Lone Star Gas Company, plaintiff herein, until the final determination by said Fifty-third Judicial District Court of Travis County, Texas, of cause No. 53033 on the docket of said court; and that said order provides that plaintiff herein, Lone Star Gas Company, shall not be subjected to any penalties, damages or forfeitures on account of the failure of said plaintiff herein to comply with the terms and provisions of the said order of the Railroad Commission of Texas entered on September 13th, 1933, or on account of any provisions of the Statutes of the State of Texas where such failure to comply with the law has taken place or takes place before the final determination of said cause No. 53033 on the docket of said District Court; and

The defendants Lon A. Smith, C. V. Terrell and E. O. Thompson, the members of and constituting the Railroad Commission of Texas, and James V. Allred, Attorney General of the State of Texas, having announced in open court by and through Elbert Hooper, First Assistant Attorney [fol. 3567] General of the State of Texas, counsel of record for said defendants and by whom said defendants appeared in this Court, that the said defendants and the State of Texas, and each and all of them, did not desire to enforce and had no intention of enforcing or attempting to enforce against the plaintiff herein, Lone Star Gas Company, any of the pains, penalties or forfeitures provided for by law by reason of any violation by Lone Star Gas Company of the terms, previsions and requirements of said order, committed or done by said plaintiff herein at any time before the final determination of said cause No. 53033 on the docket of the Fifty-third Judicial District Court of Travis County, Texas, and that said order entered in the State Court was to be construed as suspending the operation of the said order of the Railroad Commission pending the final determination of said cause; and said Assistant Attorney General of the State of Texas, for said defendants, herein announced in open court that said defendants would consent and agree to an injunction by this Court entered in this cause, restraining said defendants, and each of them, from at any time enforcing or attempting to enforce against the plaintiff herein, Lone Star Gas Company, any of the pains, penalties or forfeitures which may arise or accrue because of or by reason of any violation of the terms, provisions and requirements of said order by plaintiff herein, committed or done herein by the plaintiff, Lone Star Gas Company, at any time prior to final determination of said cause No. 53033 on the docket of the Fifty-third Judicial District Court of Travis County, Texas; and

It appearing to the Court that by reason of said stay order in said cause No. 53033 in the Fifty-third Judicial [fol. 3568] District Court of Travis County, Texas, and by reason of the aforesaid statements of the said defendants herein in open court, by and through Elbert Hooper, First Assistant Attorney General, that the plaintiff herein, Lone Star Gas Company, is fully protected from the imposition of any and all pains, penalties and forfeitures provided by law and arising by reason of the violation by Lone Star Gas Company, plaintiff herein, of any of the terms; provisions and requirements of the said order of the Railroad Commission of Texas of date September 13th, 1933, done at any time prior to the final determination of said cause No. 53033 on the docket of the Fifty-third Judicial District Court of Travis County, Texas, and that upon the entry of an interlocutory injunction in this cause in compliance with the consent statements of said Assistant Attorney General, Elbert Hooper, and of the stay order of this Court, the requirements of Section 266 of the Judicial Code of the United States, as amended, will be complied with:

It is, Therefore, Ordered, Adjudged and Decreed that the defendants Lon A. Smith, C. V. Terrell and E. O. Thompson, being the members of and constituting the Railroad Commission of Texas, and their respective successors in office and all of the assistants, agents, attorneys and representa-

tives of the said defendants be, and each of them is hereby restrained and enjoined from enforcing or attempting to enforce, or from giving any effect to, by any means or methods, the said order of the Railroad Commission of Texas dated September 13th, 1933, directed against the plaintiff, Lone Star Gas Company, or any of the pains, penalties or forfeitures provided by law for any such violation of an order [fols. 3569-3571] of said Commission by reason of the violation of any of the terms, provisions and requirements of said order, committed by plaintiff, Lone Star Gas Company, at any time prior to the final judgment in said cause No. 53033 on the docket of the Fifty-third Judicial District Court of Travis County, Texas.

It is Further Ordered that all proceedings in this cause shall be stayed in this Court pending the final determination of cause styled The State of Texas et al. vs. Lone Star Gas Company, No. 53033 on the docket of the Fifty-third Judi-

cial District Court of Travis County, Texas.

To the foregoing action of the Court in ordering a stay of all proceedings in this cause in this Court pending the final determination of said cause styled The State of Texas et al. vs. Lone Star Gas Company on the docket of the Fifty-third Judicial District Court of Travis County, Texas, the plaintiff took its exception in open court and such exception was allowed.

It is Further Ordered, however, that jurisdiction is hereby retained in this Court to enter such order and further orders upon the motion of either party as may be necessary to protect the jurisdiction of this Court or to protect the rights of any party herein.

Joseph C. Hutcheson, Jr., United States Circuit Judge. William I. Grubb, United States District Judge. T. M. Kennerly, United States District

Judge.

[fol. 3572] PLAINTIFFS' EXHIBIT No. 3

IN THE DISTRICT COURT OF TRAVIS COUNTY, TEXAS, 53RD

JUDICIAL DISTRICT

No. 53,033

THE STATE OF TEXAS et al.

LONE STAR GAS COMPANY

### STIPULATION

Be it Remembered, that in the above styled and numbered cause, as a part of the evidence introduced by the State of Texas et al., in making out its case, in chief, and directly in the first instance;

It is Agreed by the undersigned counsel of record, representing all parties to this cause, that the defendant, Ione Star Gas Company, is still charging and collecting the forty cent rate, rather than the thirty-two cent rate, provided for in the order of the Railroad Commission, bearing date of September 13th, 1933; that said thirty-two cent rate has never been put in force or effect by said defendant, at any time, and that said forty cent rate has been collected continuously at all times, since the date of the order promulgated and adopted by the Railroad Commission of Texas, on September 13th, 1933.

Witness our signatures on this 11th day of June, A. D. 1934.

For the State of Texas et al., William C. Fitzhugh, Assistant Attorney General; A. R. Stout, Assistant Attorney General. For the Defendant, Lone Star [fols. 3573-3576] Gas Company, Thompson & Barwise, Karl F. Griffith, Ben H. Powell, Roy C. Coffee, Marshall Newcomb, Attorneys for the Defendant, Lone Star Gas Company.

### [fol. 3577] PLAINTIFFS' EXHIBIT No. 4

### Report on Special Investigation of Records of Lone Star Gas Company

### Texas Properties

### March 31; 1934

[fol. 3578] Index	~
, Sie	de folio
Comparative Statement of Earnings—Public Serv-	
ice Operations—Texas Properties	3579
Gas Sales '	.3580
Gas Purchased	3581
Gathering Expenses	3582
Producing & Gathering Expenses	3383
Compressor Station Expenses	3584
Transmission System Expenses:	
For the twelve months periods ended 3-31-1934,	
12-31-1933, 12-31-1932, 12-31-1931	3585
For the calendar years 1929, and 1930	3586
General Expenses:	
For the twelve months periods ended 3-31-1934,	
12-31-1933, 12-31-1932, 12-31-1931	3587
For the calendar years 1929, and 1930	3588
Texas-Oklahoma Gas Sales Adjustment	3589
Producing Expenses	3590
Summary of Public Service Property	3591

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2116A

### Plaintiff's Exhibit No. 4-Continued

Comparative Statement of Earnings-Public Service Operations

Texas Properties

Lone Star Gas Company, Dallas, Texas

For the twelve months periods ended

			or the twelve month	is periods ended		*
	3-31-1934	12-31-1933	12-31-1932	12-31-1931	12-31-1930	. 12-31-1929
Revenues:						
Gas Sales Miscellaneous Operating Revenues Miscellaneous Non-Operating Revenues	\$7,626,462.92 1,596.78 35,001.80	\$7,387,118.42 1,442.91 35,119.54	\$8,476,715.80 $1,491.98$ $25,734.43$	\$8,904,998.03 1,631.35 31,812.39	\$10,342,313.26 4,419.90 33,096.11	\$10,673,823.14 9,543.56 32,628.00
Total	7,663,061.50	7,423,680.87	8,503,942.21	8,938,441.77	10,379,829.27	10,715,994.70
Expenses:					4	
Gas Purchased		1,071,170.87	1,029,511.13	1,118,328.28	1,324,315.60	1,348,386.94
Gathering Expenses (A)	96,589.70	95,911.08	95,717.03	107,072.95	70,040.56	51,069.99
Compressor Station Expenses	310,679.12	303,454.78	319,016.71	384,991.35		433,918.50
Transmission System Expenses	368,419.03	374,275.77	397,835.06	516,020.18	710,647.87	631,525.01
General Expenses	733,121.58	754,282.79	817,248.81	742,885.25	698,875.56	632,776.76
Taxes—Other than Gross Production and Federal Income Taxes	295,218.11	295,218.11	250,367.38	305,097.29	240,337.03	208,405.97
Auto and Truck Expenses Underdistributed	3,221.27	3,223.15	3,570.99*	1,843.37	14,371.98	2,470.56
Bad Debts and Adjustments	5,155.29	5,210.33	4,183.66	3,817.73*	3,982.56	6,269.89
Miscellaneous Non-Operating Expenses	192.72	192.72	856.22	447.70	3,872.23	
Texas-Oklahoma Gas Sales Adjustment	62,234.07	29,617.92	342,429.94	554,766.20	1,213,262.91	1,655,550.49
	2,948,324.05	2,932,557.52	3,253,594.95	3,727,634.84	4,727,647.49	4,965,432.99
	4,714,737.45	4,491,123.35	5,250,347.26	5,210,806.93	5,652,181.78	5,750,561.71
Producing Expenses (B)	30,506.28	31,183.91	26,483.89	-58,034.59	54,490.28	29,372.52
Gross Production Taxes	3,911.56	3,911.56	4,441.32	1,527.55	331.65	461.21
Drilling Tools Expenses Underdistributed	3,600.58	3,610.58	8,222.99	6,460.73	509:84*	59,441.81
Dry Holes	18,430.03	17,912.98		65,871.56	196,034.17	47,423.77
Cancelled and Surrendered Leases	166,304.21	176,139.67	245,103.65	232,271.16	67,035.04	61,046.03
Management Fees	75,413.05	73,037.17	83,797.85	87,926.88	102,074.67	92,020.05
	298,165.71	305,795.87	368,049.70	452,092.47	419,455.97	170,881.77
Net Earnings-Before Providing for Depreciation, Depletion,		A4 40K 00K 10	A4 000 00W 75	A4 MEO M44 40	AF 000 POF 01	AF FWO OW'S O.
and Federal Income Taxes	. \$4,416,571.74	\$4,185,327.48	<b>\$</b> 4,882,297.56	\$4,758,714.46	\$5,232,725.81	\$5,579,679.94

[fol. 3579]

<sup>(</sup>A) Includes producing expenses for the years 1929, and 1930, except, Repairing and Cleaning wells, and cost of abandoning wells.

(B) Includes, for the years 1929, and 1930, only the cost of Repairing and Cleaning wells and cost of abandoning wells.

### 2116B

### Plaintiff's Exhibit No. 4—Continued

Gas Sales

Lone Star Gas Company—Dallas, Texas

Texas Properties

For the twelve months periods ended

		3-31-193	4		12-31-19	933		12-31-19	932		12-31-19	31		12-31-1	930		12 31-1	929
AMILA I Communica	M.C.F.	Average Price	Amount	M.C.F.	Average Price	Amount	M.C.F.	Average Price	Amount	M.C.F.	Average Price	Amount	M.C.F.	Average Price	Amount	M.C.F.	Average Price	Amount
Affiliated Companies: Domestic Industrial	13,634,224 11,440,066		\$5,454,388.42 1,547,521.71	$13,178,080 \\ 11,057,384$	\$.4005 .1360	\$5,277,259.79 1,504,000.85	15,732,453 11,810,664		\$6,286,429.96 1,688,541.08	15,703,752 12,787,739	\$.3993 .1501	\$6,271,095.06 1,919,674.57	16,487,154 14,823,865	\$.4047 .1611	\$6,671,941.26 2,387,331.67	16,170,448 16,563,730	\$.4087 .1596	\$6,608,712.22 2,643,683.79
Total	25,074,290	.2792	7,001,910.13	24,235,464	.2798	6,781,260.64	27,543,117	. 2895	7,974,971.04	28,491,491	. 2875	8,190,769.63	31,311,019	. 2893	9,059,272.93	32,734,178	. 2827	9,252,396.01
Other Companies:  Domestic:	197,497 243,126		78,998.68 32,350.96	202,647 230,250	.4000	81,058.52 30,587.64	238,603 276,031	.4000	95;441.28 35,658.45	640,288 938,517	.4334	277,491.62 137,687.23	790,627 1,323,564	.4399	347,835.46 198,376.51	841,204 1,540,907	.4327	364,006.54 224,732.51
Total	440,623	. 2527	111,349.64	432,897	. 2579	111,646.16	• 514,634	.2547	131,099.73	1,578,805	. 2630	415,178.85	2,114,191	. 2584	546,211.97	2,382,111	. 2472	588,739.05
Other Sales: Field Sales Miscellaneous Industrial Sales	1,344,049 3,869,290	.0634	85,158.04 428,045.11	1,327,632 3,707,007	.0628	83,401.87 410,809.75	1,532,950 2,327,293	.0632	96,930.98 273,714.05	1,783,008 1,467,729	.0630	112,309.65 186,739.90	2,011,154 4,112,015	· .0559	134,845.97 601,982.39	1,900,279 4,329,576	.0709 .1612	134,720.48 697,967.60
Total	5,213,339	.0984	513,203.15	5,034,639	.0982	494,211.62	3,860,243	.0960	370,645.03	3,250,737	.0920	299,049.55	6,123,169	1203	736,828,36	6,229,855	.1337	832,688.08
Total Gas Sales: Domestic	13,831,721 16,896,531	.4000° .1239	5,533,387.10 2,093,075.82	13,380,727 16,322,273	.4005	5,358,318.31 2,028,800.11	15,971,056 15,946,938	.3996	6,381,871.24 2,094,844.56	16,344,040 16,976,993	.4007	6,548,586.68 2,356,411.35		.4063	7,019,776.72 3,322,536.54			6,972,718.76 3,701,104.38
Grand Total	30,728,252	\$.2482	\$7,626,462.92	29,703,000	\$, 2487	\$7,387,118.42	31,917,994	\$.2656	\$8,476,715.80	33,321,033	\$.2672	\$8,904,998.03	39,548,379	\$.2615	\$10,342,313.26	41,346,144	\$.2582	\$10,673,823.14

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## PAGE

# Plaintiff's Exhibit No. 4—Continued

Gas Purchased

[fol. 3581]

Texas Properties

Lone Star Gas Company—Dallas, Texas

For the twelve months periods ended

Royalty Gas Purchased Purchased from Wells Owned by Others Total Gas Purchased

Amount 39,608.24	37,238.05 29,086.85 16,535.63 31,401.43 21,254.67
Price \$.0445	.0450 .0413 .0334 .0520
M.C.F. 890,547	827,038 703,529 494,916 604,406 387,155
Amount 81 033 884 92	1,033,932.82 82 1,000,424.28 70 1,101,792.65 49 1,292,914.17 60 1,327,132.27 38
Average Price	.0540 .0518 .0555 .0564 .0555
M.C.F.	19,131,823 19,302,284 19,864,003 22,926,823 23,925,785
unt	1,071,170.87 19 1,029,511.13 19 1,118,328.28 19 1,324,315.60 22 1,348,386.94 23
Average Price	.0537 .0537 .0515 .0549 .0563
MCF	20,433,167 19,958,961 20,005,813 20,358,919 23,531,229 24,312,940
	ecember 31, 1934ecember 31, 1933ecember 31, 1932ecember 31, 1931ecember 31, 1930ecember 31, 1929
	March Decem Decem Decem Decem

## Plaintiff's Exhibit No. 4-Continued

Gathering Expenses Texas Properties

[folt 3582]

Lone Star Gas Company-Dallas, Texas

For the twelve months periods ended

	3-31-1034	12-31-1933	12-31-1932	12-31-1931
Operation:		0000	20 000 110	233
Superintendence	49	35	35	8 9
Labor Operating wells.	20	10	81	274
Fleid lines labor.	17.	90	12	186
Superintendence supplies and expenses	2,413.84	2,217.66	2,688.67	1,340.74
Gas wells supplies and expenses	88	53	43	0 0
	9	911	29	- 4
Field measuring station supplies and expenses	1.008.22	12	01.	- 9
Damages.	66.42			- 5
Maintenance				
Superintendent of Maintenance				
Maintenance of field lines				70.78
Maintenance of field structures	17.525.15	17,397.61	16,371.42	
Maintenance of gas cleaners.			- 0	: 6
Changing Construction	260.93	255.04	504.82	2,393.74
Other maintenance expenses.			2	

\$107,072.95

\$95,717.03

\$95,911.08

\$96,589.70

### Plaintiff's Exhibit No. 4—Continued

[fol. 3583]

### Producing and Gathering Expenses

### Texas Properties

### Lone Star Gas Company-Dallas, Texas

For the calendar years 1929, and 1930

4.	1930	1929
· Operation:	,	
Foremen	\$2,428.63	\$860.52
Blowing wells and drips	6,026.50	8,206.83
Other labor	4,370.55	3,599.42
Auto and livery	905.77	374.55
Tools and supplies	2,029.81	2,302.20
Miscellaneous expense	34,182.04	23,230.87
Damages	250.00	
Daniel Co	200.00	
Maintenance:		
	7 910 07	9 640 97
Changing Construction	7,319.27	3,649.27
Repairs to lines	12,527.99	8,846.33
Repairing and cleaning wells	52,785.83.	29,372.52
Abandoning wells	1,704.45	*******
	\$124,530.84	\$80,442.51
Less Expenses Considered Entirely Applicable to		400,112.01
Production:		
Repairing and cleaning wells	52,785.83	29,372.52
Abandarian wells		
Abandoning wells	1,704.45	*******
	54,490.28	29,372.52
Gathering Expenses (A)	\$70,040.56	\$51,069.99
(A) Includes undistributed producing expenses.		

Plaintiff's Exhibit No. 4—Continued

Plaintiff's Exhibit No. 4-Continued

Expenses:	ties
Station	Proper
Compressor	Texas

[fol. 3584]

Lone Star Gas. Company—Dallas, Texas

For the twelve months periods ended

	3-31-1934	12-31-1933	12 31-1932	12-31-1931	12-31-1930	12-31-1929
Operations.	202	OGL	205	594	591.	391.
Superintendence	159	80	89,685,75	117,475.27	136,214.40	137,051,48
Engineers and Ollers (labor)	471	633	428	896	922	158
Other fabor	797	728	443.	164	280	122
ruel	427	802	349.	217.	601	122
Water	396	034	137.	466.	532	825
Lubricanus	288	634	304	003	848	337
Miscellaneous supplies and expenses	13,830,29	13,635.51		630.	760	831
	***			,		*
Maintenance	614	NSG	138	626.	596.	64,419.24
Maintenance of Machinery	424	960	888	905	266.	612.
Maintenance of Water system	705	401	812	637	887	622.
Maintenance of pipe and numgs	145	384	117		15,813.57	569.
Maintenance of structures	3,118,28	3.341.71	4,783.59	592.96	321.	*
Changing construction	,					
equipment:	6,448.79	6,804.38	7,421.47	8,463.27	11,004.24	12,774.94
Total	\$310,679.12	\$303,454.78	\$319,016.71	\$384,991.35	\$447,941.19	\$433,918.50
						And the second s

	For	For the twelve months periods ended	is periods ended		
	J-31-1934	12-31-1933	12-31-1932	12-31-1931	
Operations:	-	868	573	241	
Line well-bre	47,905,44	49, 257, 32	54,315.35	77,589.78	
Increase the	8	020	698	550	
Mosummy etation labor	6	333	344	371.	
Other Transmission system lahor	26	259	248	351.	
Superintendence supplies and expenses	17	356.	732	178	
Measuring station supplies and expenses	100	184	195	189	
Transmission lines arrented and expenses	6	392.	135	173	
Inspection supplies and expenses	9	330	800	723	
Transmission system rents	2	126	343	134	
Transmission and Compressor charges naid to others	46	597	861		
Damages	2,763.81	379.	5,506.56	3,849.05	
Naintenance:	010	20 012 7	00 010 6		
Superintendence of Maintenance.	4,340.39	4,518.05	2,819.70	0,121.95	
Measuring station structures	9.525.44	8.784.14	848	19:729.32	
Transmission lines	65, 181, 16	71,335.00	406	120,945,24	
Measuring station equipment	43,105,48	41,520.92	44,284.62	59,687.61	
Cas planers	491.20	457.71	835.	1,050.76	
River crossings	2,078.20	2,068.26	2,379.15	371.46	
Other Transmission line equipment.	7,980.88	7,907.59	631.	20,205.15	
Changing construction.	4,817.70	5,017.54	306	16,255.07	
	6969 410 03	£374 975 77	£307 825 06	\$516 090 18	
	6000,413.00	4012, E10.11	00.000,1000	6010,050.10	
	Committee of the Commit	Annual or other Persons and the Persons and th	The second secon	Annual Control of the last of	

133—3104

Texas Properties

## Plaintiff's Exhibit No. 4—Continued

[fol. 3586]

Transmission System Expenses

### Texas Properties

## Lone Star Gas Company—Dallas, Texas

### For the calendar years 1929 and 1930

Operations:	1930	1929
Foremen	\$48,218.32	\$33,288.76
Line walkers	118,494.62	113,636.21
Inspection	39,484.14	50,357.09
Regulating and measuring stations	77,667.77	73,609.28
Auto and livery	14,448.18	13,279.65
Damages	5,703.39	3,689.86
Tools and supplies	11,707.42	11.074.28
Miscellaneous	96,411.82	69,960.87
Maintenance:		
Repairs to lines	135,186.15	103,972.65
Repairs to buildings	9,578.46	4.750.79
Repairs to Regulating and measuring stations	117,083.92	113,372.03
Telephone and Telegraph	26,597.20	25,180,20
Changing construction	9,947.86	14,478.57
Repairs to River Crossings	118.62	874.77
	\$710,647.87	\$631,525.01
	4110,011.01	<b>\$001</b> ,020.01

# Plaintiff's Exhibit No. 4—Continued

General Expenses

[fol. 3587]

Texas Properties

Lone Star Gas Company—Dallas, Texas

For the twelve months periods ended

	3-31-1934	12-31-1933	12-31-1932	12-31-1931	-
Administrative Salarios	\$103.046.20	\$100,960.14	134	0	
Other Conered Office Selection	173	645	364.	266,291.10	
Conoral Office Sumplies and Expenses	13,601.63	12,943.68	10,179.02	20,668.51	
Conoral Office Treveling and incidental expenses	397	144	791	5	
Conoral stationery and printing	196	428	859	6	
Low evidence	913.	553	394	4	
Congre Office rent	585	621.	065	=	
Meintenance of general structures	154	220	355	2	
Maintenance of general office equipment	941.	939	117.	1,856.35	
Telephone and Telegraph system labor	965.	7,105.01	586	6	
Telephone and telegraph system minning and expenses	645	3,497.21	692	00	
Maintenance of Telephone and Telepranh system	7,951.81	7,749.67	768	5	
Pomiletory Commission expenses	55,759.20	812		•	
Chartehle denstions	10,021,05	10.671.70	341	9.848.87	
Inimine and demagne	715.36	40		6.48	
Injuries and damages	848	671	719	240	
Welfers and mensions	296	075	645	355	
Wissellanding general administrative expenses	489	866		42,395.43	
New Rusiness advertising salaries	13,773,11	11,944.97	7,783.79	8,259.69	
New Rusiness soliciting and commissions	-	-			
Other New Rusiness labor	919	380	17,761.86	24,194.03	
Advertising sunning and expenses	158	828	932	70,268.15	
New Business supplies and expenses.	8,593.93	9,047.41	269	6,377.11	
	\$733.121.58	\$754.282.79	\$817.248.81	\$742,885.25	

## Plaintiff's Exhibit No. 4—Continued

[fol. 3588]

### General Expenses

### Texas Properties

Lone Star Gas Company-Dallas, Texas

For the calendar years 1929 and 1930

	1930	1929
Salaries and expenses of Officers	\$89,431.22	\$68,456.82
Office Salaries and expenses	213,024.94	165,041.48
Legal Department—Salaries and expenses	42,639.90	34,161.76
Insurance	36,827.68	51,880.52
Telephone and Telegraph	18,647.92	17,169.51
Subscriptions and donations	26,793.05	30,727.79
Engineering Department-Salaries and expenses.	87,882.69	57,059.77
Office Building expenses	20,401.51	18,562.70
Geological Department expenses	7,582.30	5,263.60
Valuation Suspense	21,487.38	37,237.45
Advertising	61,193.09	83,133.99
Industrial gas expense	30,700.62	28,100.00
Miscellaneous	42,263.26	35,981.37
	\$698,875.56	\$632,776.76

(Here follows one paster, side folio 3589)

2124A
Plaintiff's Exhibit No. 4—Continued
Texas—Oklahoma Gas Sales Adjustment—8 Oz. Base

[fol. 3589]

Lone Star Gas Company—Dallas, Texas

		6	For the twelve mor	ths periods ended		
Gas Purchased and Produced—Oklahoma:	3-31-34	12-31-33	12-31-32	12-31-31	12-31-30	12-31-29
Gas Purchased—M.C.F. Gas Produced Including Royalty Purchased—M.C.F. Net Storage—M.C.F.	1,085,264 681,236 342,249*	1,076,562 613,780 422,567*	2,105,472 428,901 159,835	3,493,214 260,561 110,586*	6,401,203 272,760 5,602*	8,519,393 311,902 168,535*
Total	1,424,251	1,267,775	2,694,208	3,643,189	6,668,361	8,662,760
Gas Sold—Oklahoma: Gas Sales—Domestic—M.C.F. Gas Sales—Industrial—M.C.F.	557,684 588,683	564,106 571,288	680,630 593,293	679,647 627,340	696,486 671,909	670,270 761,433
Total	1,146,367	1,135,394	1,273,923	1,306,987	1,368,395	1,431,703
Net Gas Sold in Texas Neglecting Line Loss—M.C.F	277,884	132,381	1,420,285	2,336,202	5,299,966	7,231,057
Average Sales Price—Texas	\$.24819	\$.24870	\$.26558	\$.26725	* \$.26151	\$.25816
Amount	68,968.03	. 32,923.08	377,196.39	624,349.98	1,385,994.10	1,866,769.66
Less: Compression and Transmission Expense on Net Gas Sold in Texas Neglecting Line Loss	6,733.96	3,305.16	34,766.45	69,583.78	172,731.19	211,219.17
Total	\$62,234.07	\$29,617.92	\$342,429.94	\$554,766.20	\$1,213,262.91	\$1,655,550.49

<sup>\*</sup> Net Gas Stored in Excess of Withdrawals.

### Plaintiff's Exhibit No. 4-Continued

[fol. 3590]

### Producing Expenses

### Texas Properties

### Lone Star Gas Company-Dallas, Texas

For the twelve months periods ended

		3-31-1934	12-31-1933	12-31-1932	12-31-1931
Abandoni	ng wells	\$1,195.90	\$1,170.90	\$6.91*	\$17,075.79
Superinte	ndence of lifting	4,753.27	4,636.36	3,270.13	1,368.16
		25.36	25.36	18.62	131.84
Lifting s	upplies and ex				
		4.37	14.65	5.73	1.43
	nce	121.10	166.07	48.26	132.92
out wel	and cleaning	22,745.43	23,645.66	21,932.84	31,732.14
	eous lifting ex-	1,660.85	1,524.91	1,215.22	7,592.31
		\$30,506.28	\$31,183.91	\$26,483.89	\$58,034.59

<sup>\*</sup> Indicates red figures.

[fol. 3591-3592]

Summary of Public Service Property

### Texas Properties

### Lone Star Gas Company-Dallas, Texas

At March 31, 1934, and December 31, 1931

Adjusted Book Cost:	Balance 12-31-1931
Leases	
Mineral Rights	13,768.00
Gas Rights	21,974.48
Lands in Fee—Clay County, Texas	27,344.70
Lands in Fee—Limestone County, Texas	3,003.00
Drilling Tools.	101,985.03
Production System Property—Gas Farms	. 3,038,898.84
Gathering System Property	809,888.66
Petrolia Field Account	758,619.23
Compressor Station Property	4,157,583.14
Transmission System Property-Pipe Lines and Equipment.	. 30,945,793.52
Gas Connections	13,699.22
Telephone and Telegraph System (15% allocated to Oklahoma	306,715.05
Automotive Equipment	. 360,541.31
Dallas Machine Shop (15% allocated to Oklahoma)	
Real Estate (15% allocated to Oklahoma)	75,344.71
General Office Building (15% allocated to Oklahoma)	
General Office Furniture and Fixtures (15% allocated to	
Oklahoma)	
Tools and Construction Equipment	
and Constitution Equipment.	
Total as at December 31, 1931	\$42,552,769.02
Net Addition to Public Service Property:	
Texas Properties, from January 1, 1932, through March 3	1.
1934	
Α	-,,
Total as at March 31, 1934	. \$44,053,612.30
	, ,

(Here follows four pasters, side folios 3593-3595 and 3597-3598, 3599, and 3600)

### 2126A

### [fols. 3593-3595] Plaintiffs' Exhibit No. 5

### Report on Special Investigation of Records of Lone Star Gas Company

### March 31, 1934

Comparative Statement of Earnings—Public Service Operations

Lone Star Gas Company—Dallas, Texas

For the twelve months periods ended

							A		
	Revenues:	3-31-1934	12-31-1933	12-31-1932	12-31-1931	12-31-1930	12-31-1929,	12-31-1928	12-31-1927
	Gas Sales	\$7,926,274.88 1,596.78 38,107.23	\$7,688,724.10 1,442.91 38,142.04	\$8,829,713.37 1,491.98 27,982.85	\$9,265,639.45 1,631.35 34,591.85	\$10,711,735.39 4,419.90 35,987.72	\$11,045,925.90 9,543.56 32,869.03	\$9,502,268.06 4,539.16 35,169.10	\$8,999,650.55 20,624.41
	Total	\$7,965,978.89	\$7,728,309.05	\$8,859,188.20	.\$9,301,862.65	\$10,752,143.01	\$11,088,338.49	\$9,541,976.32	\$9,020,274.96
	Expenses:				,			-	
•	Gas Purchased. Gathering Expenses (A). Compressor Station Expenses.	1,144,620.17 131,713.95 346,306.81	131,326.29 338,433.01	$\substack{1,214,964.33\\135,110.30\\358,402.61}$	1,487,431.81 140,961.09 447,292.41	2,000,705.73 98,540.64 532,314.96	2,205,527,40 74,758,43 532,689,96	1,833,783.69 67,128.19 515,487.76	
	Transmission System Expenses.  General Expenses.  Taxes—Other than Gross Production and	426,114.97 848,296.40	431,520.56 871,324.95	454,086.37 941,079.43	. 584,115.01 874,985.43	801,221.80 $828,497.25$	716,685.93 $776,408.61$	663,441.45	$604,333.65 \\ 491,748.32$
	Federal Income Taxes  Auto and Truck Expenses Underdistributed.  Bad Debts and Adjustments  Miscellaneous Non-Operating Expenses	353,390.45 3,775.07 6,475.73 192.72	$\begin{array}{c} 355,463.27 \\ 3,775.07 \\ 6,530.77 \\ 192.72 \end{array}$	$\begin{array}{c} 337,942.16 \\ 4,164.90* \\ 6,773.32 \\ 856.22 \end{array}$	$\begin{array}{c} 396,961.89 \\ 2,131.06 \\ 7,727.33* \\ 477.74 \end{array}$	303,545.79 16,721.33 3,982.56 4,505.21	275,281.31 2,926.51* 8,392.69	259,996.66 114.73* 6,258.04	181,246.56 22,328.19* 1,2f5.98
		3,260,886.27	3,270,595.62	3,445,049.84	-3,926,629.11	4;590,035.27	4,586,817.82	3,912,327.85	3,874,820.10
		4,705,092.62	4,457,713.43	5,414,138.36	5,375,233.54	6,162,107.74	6,501,520.67	5,629,648.47	5,145,454.86
	Producing Expenses (B) Gross Production Taxes Drilling Tool Expenses Underdistributed Dry Holes Cancelled and Surrendered Leases	40,613.89 •7,086.46 4,219.59 19,221.57 169,362.09	41,408.80 5,013.64 4,219.59 18,704.52 188,629.92	31,004,67 5,751,14 9,590,61 14,288,55 255,829,03	60,068.40 2,047.06 7,469.05 65,871.56 239,230.96	60,872.41 1,125.65 593.18* 196,034.17 104,168.87	33,210.51 901.72 70,412.00* 47,423.77 75,523.70	43,769.84 1,151.48 7,869.63 29,561.61 12,480.59	32,078.41 1,716.05 37,769.36* 58,374.48 64,299.54
	Management Fees	78,294.78	75,940.60	87,197.87	91,375.38	105,625.72	95,062.03		
		318,798.38	333,917.07	403,661.87	466,062.41	. 467,233.64	181,709.73	79,093.89	118,699.12
	Net Earnings—Before Providing for Depreciation, Depletion, and Federal Income Taxes	\$4,386,294.24	. \$4,123,796.36	\$5,010,476.49	\$4,909,171.13	\$5,694,874.10	\$6,319,810.94	\$5,550,554.58	\$5,026,755.74
						Cycle of the later of			

<sup>\*</sup> Indicates red figures.

[fol. 3596]

<sup>(</sup>A) Includes producing expenses for the years 1927, through 1930, except, Repairing and Cleaning wells and cost of abandoning wells.

<sup>(</sup>B) Includes, for the years 1927, through 1930, only the cost of Repairing and Cleaning wells and cost of abandoning wells.

[fols. 3597-3598]

Lone Star Gas Company—Dallas, Texas For the twelve months periods ended

		3-31-19	934		12-31-1	933		12-31-1	932		12-31-1	931		12-31-193
		Average			Average			Äverage			Average			Average
Affiliated Companies:	M.C.F.	Price	Amount	M.C.F.	Price	Amount	M.C.F.	Price	Amount	M.C.F.	Price	Amount	M.C.F.	Price
Domestic	14,171,179 $11,815,942$	\$.4000 .1362	\$5,668,123.26 1,609,045.23		\$.4004 .1369	\$5,494,113.15 1,565,670.69	16,390,072 $12,171,047$	\$.3995 .1439	\$6,548,514.44 1,751,850.57		\$.3994 .1510	\$6,533,579.28 1,982,580.32		\$.4040 .1618
Total	25;987,121	. 2800	7,277,168.49	25,150,292	. 2807	7,059,783.84	28,561,119	. 2906	8,300,365.01	29;485,407	.2888	8,516,159.60	32,278,474	. 2905
Other Companies:		*												,
DomesticIndustrial	218,226 245,593	. 4000 . 1339	87,290.28 32,873.67	222,238 232,736	.4000 .1337	88,894.92 * 31,119.77	261,616 281,693	. 4000 . 1309	104,646.48 36,875.80	665,755 945,464	.4286 .1472	285,378.62 139,180.85	816,260 1,328,601	.4355
Total	463,819	. 2591	120,163.95	454,974	. 2638	120,014.69	543,309	.2605	141,522.28	1,611,219	. 2635	424,559.47	2,144,861	.2587
Other Sales:										/		*		
Field Sales:														
Compressor Stations	509,869 1,081,711	.0631	32,194.32 66,199.20	1,019,482 $497,767$	.0638,	65,049.15 31,057.90	1,137,383 610,137	0643 $0627$	73,153.52 38,264.98	1,243,956 776,236	.0647	80,446.01 49,287.12	1,401,435 864,802	.0672
Outside—Industrial	3,877,376 4,723	.1109 .1275	429,946.86 602.06	$3,710,835 \\ 5,044$	.1111	$412,176.92 \\ 641.60$	$2,169,910 \\ 170,059$	.1242	$269,484.10 \\ 6,923.48$	1,034,055 477,147	$.1783 \\ .0227$	$184,365.00 \\ 10,822.25$	3,559,153 $668,049$	. 1625
Total	5,423,679	.0975	528,942.44	5,233,128	.0973	508,925.57	4,087,489	.0949	387,826.08	3,531,394	. 0920	324,920.38	6,493,439	.1198
Total Gas Sales:														
Domestic	14,389,405 17,485,214	.4000 .1242°	5,755,413.54 2,170,861.34	13,944,833 16,893,561	.4004 .1247	4,583,008.07 2,105,716.03	16,651,688 $16,540,229$	. 3995 . 1316	6,653,160.92 2,176,552.45		. 4005 . 1390	6,818,957.90 2,446,681.55		. 4054
Grand Total	31,874,619	\$.2487	\$7,926,274.88	30,838,394	\$.2493	\$7,688,724.10	33,191,917	\$.2660	\$8,829,713.37	34,628,020	\$.2676	\$9,265,639.45	40,916,774	\$.2618

	12-31-1	930		12-31-1	929		12-31-1	928		12-31-19	927.
F.	Average Price	Amount	M.C.F.	Average Price	Amount	M.C.F.	Average Price	Amount	M.C.F.	Average Price	Amount
,007 ,467	\$.4040 .1618	\$6,931,580.21 2,447,193.84	16,814,583 16,878,240	\$.4078 .1602	\$6,856,640.67 2,704,371.91	13,595,363 14,296,867	\$.4081 .1646	\$5,548,920.36 2,353,327.84	10,852,054 $18,047,224$	\$.4069 .1578	\$4,415.606.76 2,847,207.11
.474	.2905	9,378,774.05	33,692,823	.2838	9,561,012.58	27,892,230	.2833	7,902,248.20	28,899,278	.2513	7,262,813.87
.260 601	.4355	355,525.36 199,459.50	867,339 1,543,350	.4287	371,847.04 225,257.77	1,396,802 2,089,407	.4201	586,808.84 311,045.54	1,319,233 2,420,865	.4080 .1511	538,198.72 365,878.52
861	.2587	554,984.86	2,410,689	. 2477	597,104.81	3,486,209	.2575	897,854.38	3;740,098	.2417	904,077.24
1											
435	.0672 .0687	94,197.62 59,385.69	1,395,301 800,346	.0701 .0759	97,765.01 60,724.57	1,393,452 744,893	0.0674 $0.0759$	$93,942.89 \\ 56,529,26$	1,427,400 645,339	.0609	86,921.77 49,045.75
153 049	.1625 .0686	578,548.09 45,845.08	3,793,274 685,414	.1710	648,635.19 80,683.74	3,043,478 132,499	.1791 .0486	545,252.59 6,440.74	3,619,313 137,891	.1884 .1079	681,909.81 14,982.11
439	.1198	777,976.48	6,674,335	.1330	887,808.51	5,314,322	.1321	702,165.48	5,829,943	.1428	832,759.44
267 507	.4054 .1493	7,287,105.57 3,424,629.82	17,681,922 25,095,925	,4088 ,1521	7,228,487.71 3,817,438.19	14,992,165 21,700,596	.4093 .1551	6,135,729.20 3,366,538.86	12,171,287 26,298,032	.4070 .1538	4,953,805.48 4,045,845.07
774	\$.2618	\$10,711,735.39	42,777,847	\$.2582	\$11,045,925.90	36,692,761	\$.2590	\$9,502,268.06	38,469,319	\$.2339	\$8,999,650.55

2126C

## .Plaintiff's Exhibit No. 5-Continued

Miscellaneous Non-Operating Revenues

Lone Star Gas Company—Dallas, Texas

For the twelve months periods ended

	1							
7	3-31-1934	12-31-1933	12-31-1932	12-31-1931-	12-31-1930	12-31-1929	12-31-1928	. 12-31-1927
Cottage Rentals	\$9,948.00	\$9,896.00	\$10,228.25	\$10,211.00	\$10,838.08	\$9,983.00	\$9,582.15	\$9,273.75
Office Building Rentals	25,715.00	25,765.00	13,680.00	17,901.44	20,335.96	19,051.67	18,850.00	4,140.00
Farm Rentals	994.22	1.097.32	47.88	.532.50			270.00	302.50
Lease Rentals				211.00	138.75	262.25	258.00	243.00
Telephone Pole Rentals	250.41	205.15	225.13	242.05	1,149.75	584.95	285.55	366.45
Telephone Pole Rentals.			566.39	60.00	340.00	2,035.00	829.67	
Telephone Revenues	********		475.00	1.140.00				
Sales of Electric Current	834.90	846.99	694.65	660.80	762.75	389.13	540.32	427.74
Miscellaneous Labor Revenues				1,206.34	1,395.56			
Sundry Earnings	86:52	54.02	211.94	979.41	918.79	10.00	28.50	10.00
Accounts Payable balances charged off				354.51				1111111111
Dividends on Insurance Premiums					75.23	239.78	4.503.96	3,327.68
Sales of Gas Drippings						**********		1,915.74
Sale of Lease						300.00		
Junk Wood and Construction Tools Sold	. (		67.63	1.092.80	32.85	13.25	20.95	171.05
Extension Books.								446.50
Old Freight Claims received	239.93	239.93	1.752.63					
Royalty Interest—Gas		37.63	33.35					
							00000000	
Total	\$38,107.23	\$38,142.04	\$27,982.85	\$34,591.85	\$35,987.72	\$32,869.03	\$35,169.10	\$20,624.41
			,				,	,

2126D

Plaintiff's Exhibit No. 5-Continued

Gas Purchased

Lone Star Gas Company—Dallas, Texas

For the twelve months periods ended

	Tot	al Gas Pu	rchased	Purchased fro	om Wells	Owned by Others	Royal	ty Gas P	urchased		Gas Stora	ige°
		Average		0	Average			Average			Average	
	M. C. F.	Price	Amount	M. C. F.	Price	Amount	M. C. F.	Price	Amount	M. C. F.	Price	Amount
March 31, 1934	21,183,253	\$.0540	\$1,144,620.17	20,528,621	\$.0551	\$1,130,380.94	996,881	\$.0486	\$48,464.00	342,249*	\$.10	\$34,224.86*
December 31, 1933	20,614,682	.6549	1,132,028.98	20,109,921	.0561	1,128,844.14	927,328	.0490	45,441.54	422,567*	.10	42,256.70°
December 31, 1932	22,660,358	.0536	1,214,964.33	21,714.431	_0535	1,161,350.98	786,092	.0479	37,629.85	159,835	.10	15,983.50
December 31, 1931	.23,658,778	.0629	1,487,431.81	.23,037,719	.0636	1,465,276.05	731,645	.0454	33,214.36	110,586*	.10	11,058.60*
December 31, 1930	29,589,173	.0676	2,000,705.73	28,742,556	.0683	1,963,776.40	852,219	.0440	37,489.53	5,602*	:10	560.20*
December 31, 1929	32,167,968	.0686	2,205,527.40	31,665,973	.0693	2,193,234.89	670,530	.0435	29,146.01	168,535*	.10	16,853.50*
December 31, 1928	29,275,765	.0626	1,833,783.69	28,908,812	.0627	1,811,606.65	366,953	.0604	22,177.04		.10	*******
December 31, 1927	31,706,928	.0632	2,002,932.49	31,441,952	.0631	.1,982,981.91	264,976	0753	19,950.58		.10	********

<sup>\*</sup> Represents the excess of gas stored over gas withdrawn.

[fol. 3600]

# Plaintiffs' Exhibit No. 5—Continued

# Gathering Expenses

[fol. 3601]

Lone Star Gas Company—Dallas, Texas

For the twelve months periods ended

	3-31-1934	12-31-1933	. 12-31-1932.	12-31-1931	
Operation:	38	40	056	920	
Tabor oversting wells	26,962.47	25, 126, 18	26,993.62	17.998.72	
Field lines labor	127	48	907	352	
Field measuring station labor.	392.	70	834	963	
Superintendence gupplies and expenses	531	40	995.	195	
Cha wells supplies and expenses	189	22	167	112.	
Field lines applies and expenses	136.	69	577.	365	
Field measuring station supplies and expenses	354.	03	448.	235	
Other supplies and expenses	223	.96	790.	345.	
Damages		40			
				2	
Maintenance	-				
Superintendent of Maintenance			F, 149.75	1,612.99	
Maintenance of field lines	7,536.01	8,989.60	11,400.40	683	
Maintenance of field structures.	133	465	128.69	88	
Maintenance of measuring stations.	8.5		22, 204.55	23, 189, 21	
Maintenance of gas cleaners.				900	
Other Maintenance expenses	255.04	255.04	607.59	2,695.69	
	\$131,713.95	\$131,326.29	\$135,110.30	\$140,961.09	

Plaintiffs' Exhibit No. 5—Continued

[fol. 3602] Producing and G	Producing and Gathering Expenses			
Lone Star Gas Company—Dallas, Texas For the calendar years 1927, to 1930, both inclusive	pany—Dallas, Tex 7, to 1930, both in	as clusive		
Operation:	1930	1929	1928	1927
Foremen Blowing wells and drins	\$2,975.66	\$1,137.96	\$3,598.39	\$6,887
Other labor.	5,408.37	4,473.50	6,142.21	4,865.
Tools and supplies.	2,285.78	2.958.95	306.64	1,906.
Miscellaneous expense  Damages.	49,290.09	33,802.78	6,180.68	5,444.
Maintenance				
Changing Construction. Renairs to lines	10,755.20	7,667.77	33,589.53	20,019.
Repairing and cleaning wells Abandoning wells	56,035.78 4,836.63	29,678.98 3,531.53	12,126.78 44,976.88 1,207.04*	23,623. 8,454.
Less Expenses Considered Entirely Applicable to Production:	\$159,413.05	\$107,968.94	\$110,898.03	\$90,461.
Repairing and cleaning wells.	56,035.78	29,678:98	44,976.88	23,623.

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\$58,383.25 32,078.41

\$67,128.19 . 43,769.84

33,210.51 \$74,758.43

60,872.41 \$98,540.64

> (A) Includes undistributed producing expenses. \* Indicates red figure.

Gathering Expenses (A)...

(Here follows one paster, side folio 3603)

2128A

## Plaintiff's Exhibit No. 5—Continued

[fol. 3603]

Compressor Station Expenses

Lone Star Gas Company—Dallas, Texas

			. F	or the twelve m	onths periods en	nded	•	
Operations	3-31-1934	12-31-1933	12-31-1932	12-31-1931	12-31-1930	12-31-1929	12-31-1928	12-31-1927
Superintendence Engineers and Oilers (labor) Other labor Fuel Water Lubricants Tool expense Miscellaneous supplies and expenses	66,185.57 18,902.68 5,621.34 2,068.75 16,624.36	\$39,746.25 83,791.08 27,983.74 65,049.15 19,593.90 5,234.56 2,115.69 16,567.09	\$41,836.69 95,805.09 24,136.22 72,475.30 20,770.15 6,426.04 1,455.22 19,177.17	\$55,443.95 131,385.83 28,345.16 80,446.01 24,183.80 8,020.66 2,310.41 29,340.04	\$45,209.69 161,772.68 29,274.54 94,197.62 33,669.38 9,280.23 3,580.15 29,036.27	\$41,821.56 169,565.48 23,896.01 97,617.12 26,673,94 9,939.13 3,232.50 28,887.71	\$34,108.01 177,420.50 .24,113.09 93,962.80 22,297.49 11,094.37 3,345.01 25,833.10	\$34,325.82 °, 192,385.29 22,841.32 87,255.73 26,916.01 11,203.06 3,692.54 32,781.36
Maintenance of Machinery.  Maintenance of Water System.  Maintenance of Pipe and Fittings.  Maintenance of Structures.  Changing Construction.  Maintenance of other compressor station equipment.  * Indicates red figures	6;026.31 12,876.97 3,118.28 6,943.28	47,124.84 6,831.22 4,718.05 9,079.22 3,341.71 7,256.51	47,013.51 7,677.59 3,152.39 6,045.55 4,783.59 7,648.10	53,107.46 8,999.57 6,235.46 9,829.51 785.56 8,858.99	82,082.21 10,392.23 9,058.45 20,133.63 528.52 4,099.36	\$9,045.48 9,169.83 11,078.77 16,939.81 549.70 4,272.92 \$532,689.96	91,235.24 6,946.13 9,021.18 16,398.63 264.01 551.80*	101,822.44 9,030.56 8,181.73 17,942.26 1,893.16 7,016.76

# Plaintiffs' Exhibit No. 5—Continued

Transmission System Expenses

[fol. 3604]

Lone Star Gas Company-Dallas, Texas

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	3-31-1934	12-31-1933	12-31-1932	12-31-1931	
Operations: Superintendence	303	304	776.	580	
Line walkers	866	942.	492	454	
Ingrection	905	837	975	433	
Measuring station labor	455	902	287	106	
Other Transmission system labor	948	570	022	875	
Superintendence supplies and expenses			12,584.08	17,867.06	
Measuring Station supplies and expenses	003	742.	617	717	*
Transmission lines sumplies and expenses	395	100	413	875	
Transmission system rents	445	438	955	201	
Transmission and Compressor charges paid to others	256	597	498	825	
Damages	3.309.28	3,190.06	5,998.55	4,272.55	
Maintenance:					
Superintendence of maintenance	5,318.67	5,700.55	3,372.08	7,888.08	
Maintenance of:					
Measuring station structures	719	885	582	202	
Transmission lines	78 125 81			504	
A CAROLINA MARKET	426	609	670	684	
Con aleganing statement equipment.	512	470	885		
Distor Choosings	441	435	793	407	
Other transmission line equipment	630	358	325	780	
Changing construction.	5,446.78	5,628.54	11,318.11	17,348.30	
	\$426.114.97	\$431.520.56	\$454.086:37	\$584,115.01	4
					1.
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Plaintiffs, Exhibit No. 5—Continued	No. 5—Conti	nued		
[fol. 3605] Transmission 8	Transmission System Expenses			
Lone Star Gas Company—Dallas, Texas	pany-Dallas, Tex	8.8		
For the calendar years 1927, to 1930, both inclusive	27, to 1930, both in	nclusive		
	1930	3. 1929	1928	192
Operations: Foremen.	269	\$41,471.94	\$36,043.39	\$18,341
Inspection	88	57,061.96	56,820.72	52,172
Regulating and Measuring stations.	972	81,480.28	120,029.39	116,554
Damages	278	3,761.45	1,712.33	2,60
Tools and supplies. Miscellaneous	13,178.02	13,073.25	11,668.86	7,330
Maintenance:				
Repairs to lines	013	121,097.15	135, 106.84	134,406
Repairs to buildings	228	7,748.43	6,314.99	7,663
Repairs to regulating and Measuring stations.  Telephone and Telegraph	28,627.79	27.969.89	24.917.55	18,246
Changing Construction	10,857.83	14,929.19	11,895.37	18,353
repairs to tavel Crossings.	120.41	90.100	00.101.00	0,000
	\$801,221.80	\$716,685.93	\$663,441.45	\$604,333

# Plaintiffs' Exhibit No. 5-Continued

## General Expenses

[fol. 3606]

Lone Star Gas Company—Dallas, Texas

For the twelve months periods ended

		3-31-1934	12-31-1933	12-31-1932	12-31-1931	
	Administrative salaries	\$120,761.98		454		
	Other General Office salaries	320,137,69		100	850	
	General Office supplies and expenses	15,940.03		874	894	
	General Office traveling and incidental expenses.	28,592.26		413	206	
	General stationery and printing.	12,301.64		330	011	
-	Law expense.	50,291.79		279	426	
-	General Office rent.	13,576.79		404	279	
1	Maintenance of general structures.	27,134.85			24,650.71	
	Maintenance of general office equipment	2,275.06		470	146	
	Telephone and telegraph system labor.	8,162.81		014.	777	
	Telephone and telegraph system supplies and expenses.	3,100.26		472	440	
	Maintenance of telephone and telegraph system.	9,318.89		894	109	
	Regulatory Commission expenses.	56,204.18		739	895	
	Charitable donations	10,021.05		341	848	
	Injuries and damages.	838.34		339	1	0
	Insurance expense.	27,948.98		830	647	œ
	Welfare and pensions	8,165.09		917.	502	
	Miscellaneous general administrative expenses	32,216.03	100	200	012	1
	New Business advertising salaries	16,140.99		078	548	
	New Business soliciting and commissions.	19,827.92	20,357.09	20,715.95	696	
	Other New Business Labor	1.93				
	Advertising supplies and expenses	55,266.43	.847	.407		
*	New Business supplies and expenses.	10,071.41	10,596.64	12,326.93	7,372.38	
		\$848,296.40	\$871,324.95	\$941,079.43	\$874,985.43	

		Plaintiffs,	Exhibit.N	Plaintiffs' Exhibit No. 5-Continued	panu			
[fol. 3607]	.*		General Expenses	. seeueda	0	8		
	• ;	For the calenda	Gas Compar r years 1927,	Lone Star Gas Company—Dallas, Texas For the calendar years 1927, to 1930, both inclusive	as ''n nelusive			
1				1930	1929	1928	1927	
Salaries and expenses of Official	Officials		******	\$104,050.29	\$81,090.76	\$82,400.98	\$66.350.5	patro
Legal Defertment salaries and				247,847.52	195,500.45	. 173,547.09	189,125.4	
Insurance	co ann capellacs			49,610.12	40,466.43	34,740.54	28, 138, 3	10
Telephone and telegraph				91 606 94	90,455.25	35,619.77	37,112.8	_
Subscriptions and donations.	ions			28,576.43	32,884.30	18.829.45	13,640,75	-
Office Building expenses	salanes and exper	nses.,		. 102,248.62	67,590.35	49,661.33	26,518.83	-
Geological Department expense	xpenses			8,821.76	21,988.51 6,235 (II	22,469.34	16,256.13	00.
Valvation suspense	*************			42,974.76	74,474.90	CF. 700'0	9,386.00	•
Advertising.		*************		71,196.15	98,476.65	70, 162, 37	60, 759, 04	
Miscellaneous				49,171.91		23,987.93	31,346.45	
				\$828,497.25	\$776,408.61	\$566,346.79	\$491,748.32	
[fol. 3608]	4	·Lone Star	Producing Expenses	Producing Expenses Lone Star Gas Company—Dallas, Texas	918			
		For the t	weive month	For the twelve months periods ended	12-31-1933	12-31-1939	19 21-1021	
Abandoning Wells				\$1,626.52	\$1,601.52	. \$1.222.49	\$17.389.70	-
Labor.				5,834.90	5,868.58	4,424.28	1,395.25	
Lifting supplies and expenses	nses			4.37	14.65	5.73	161.84	
Repairing and cleaning out wells	ut wells.		/	20 707 05	21 777 00	48.26	147.59	-
Miscellaneous lifting expense	ense			2,181.65	1,932.68	1;514.07	7,625.56	
•				\$40,613.89	\$41,408.80	\$31,004.67	\$60,068.40	
		7						

# Plaintiffs' Exhibit No. 5—Continued

	Towns
Service Property	Dallas
Service	Company
Public	Gas.
	State
	Lone Star Can

[fol. 3609]

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	Dec

			*			
		Audit		Increase		
	Adjusted	Increases		By Company's	Total	
	Book Cost	Decreases*	Book Cost	Revaluation.	Per Books	
Leages	569	\$50.292.32*	862		- 1	
Mineral Rights.	795.	50.00	845		845	
Gas Rights.	974.		974		974	
Lands in fee, Clay County, Texas	344		344		344	. 10
Lands in fee, Limestone County, Texas	003	********	003		003	
Lands in fee, Stephens County, Oklahoma	878.		878		878	
Drilling Tools.	995.		995		908	
Production System Property—Gas Farms	3.300,240,16	381	3.060.858.82	725	3.911,583.98	
Gathering System Property.	890	.167	057	584	642	
Petrolia Field Account.	619	116,415.59	203	693, 297, 43	501	
Compressor Station Property	015.		.015	894	606	
Transmission System Property-Pipe Lines and						
	401	. 66,167.50	,233	13,706,438.86	672	
Gas Connections	020		.050		020	
Telephone and Telegraph System.	.841		.841	896	737	
Automotive Equipment.	241		241	838	080	
Dallas Machine Shop:	.862		.375	951	326	
Real Estate.	88,640.84	6,512.41	82,128.43	79,449,47		
General Office Building.	,772.		,772.	461.	234	
General Office Furniture and Fixtures.	408	**********	408	.696	104	
Tools and Construction Equipment	,607		,607		• 12,607.40	
	\$48.455.152.34	\$305.454.61	\$48, 149, 697, 73	£18 071 933 90	\$66 990 031 79	
				0000 1 100	100 100	

## Plaintiffs' Exhibit No. 5—Continued

[fol. 3610]

### Leases

### Lone Star Gas Company—Dallas, Texas

### December 31, 1931

Adjusted Book Cost	Decrease By Audit Adjustments	Book Cost
\$1,206,782.43 34,623.72	\$47,852.74 2,439.58	\$1,254,635.17 37,063.30
19,163.71		19,163.71
\$1,260,569.86	\$50,292.32	\$1,310,862.18
	Adjusted Book Cost \$1,206,782.43 34,623.72 19,163.71	Adjusted Book Cost By Audit Adjustments \$1,206,782.43 \$47,852.74 2,439.58

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[fol. 3611] · P	roduction System	Production System Property-Gas Farms	ırms		
)	one Star Gas Con	Lone Star Gas Company—Dallas, Texas	xas		
	Decemb	December 31, 1931			
	Adjusted Book Cost	Increase By Audit Adjustments	Book Cost	Increase By Company's Revaluation	Total Per Boc
Gas Farms. Completed Construction carried in "Work in Progress" account.	5,681.80	\$269,381.04	5,681.80		5,6
		\$239,381.34	\$3,060,858.82	\$850,725.16	\$3,911,5
Adjusted Book Cost—Gas Farms Leases or Land—including purchased wells	<b>\$</b> 3,294,558.36	\$10019,487.88	\$1.258.113.93		
Wen Construction				\$986,134.16	\$30,8

## Plaintiffs' Exhibit No. 5-Continued

Flaintins	EXHIBIT NO.	—Continue	ea
[fol. 3612] Gat	hering System Pi	roperty	
	Gas Company-		
	December 31, 19		
Panhandle Field Petrolia Field Pottsboro Field South Texas Field West Texas Field Duncan Field Fox Field Miscellaneous	Adjusted Book Cost \$255,095.28 7,799.41 3,570.88 6,727.06 530,291.24 90,668.17 177,927.11 57,811.08	Increase By Company's Revaluation \$37,039.29 134,922.65 5,484.28 92,469.39 102,780.67 223,637.20 199,749.11*	Total Per Books \$292,134.57 142,722.06 9,055.16 66,727.06 622,760.63 193,448.84 401,564.31 141,938.03
	\$1,129,890.23	\$396,584.37	\$1,526,474.60
* Indicates red figures.			
	atrolio Field Acce		
*	etrolia Field Acco		6
Lone Star	Gas Company—		
	December 31, 19		
Pipe			\$73,896.34 20.00
Drips and Blow Offs			15,796.29 879.94
Other Material.			. 1,228.68
Construction			100,553.36
Buildings			5,459.44 347,922.99
Regulating Stations			4,066.59
Measuring Stations			2,437.32
Gas Wells			208, 527.16
Miscellaneous Items			409.00
Total			\$758,619.23
* Indicates red figures.			. 4.00,015.20
Revaluation	• ,		
December 31, 1925 December 31, 1928		\$97,317.87 595,979.56	
Total Revaluation			693,297.43
Total			\$1,451,916.66
Total shown above	our schedule of	Public Service	\$1,451,916.66
Property			1,335,501.07
Difference			\$116,415.59
Difference made up of:			
Clay County, Texas, leases, veloped Leases, transferred	d to Petrolia Field	1	
account in the above sche			
Well construction cost, char- by Company, Capitalize schedule	d in the above	70,838.10	
4 *			-

70,838.10 \$116,415.59

\$116,415.59

## Plaintiffs' Exhibit No. 5-Continued

[fol. 3614]

Compressor Station Property

Lone Star Gas Company—Dallas, Texas

December 31, 1931

	December 31, 13	01		
	Adjusted Book Cost	By Company's Revaluation	Total Per Books	
Compressor Station Property. Completed Construction carried in "Work in Progress"		\$1,509,894.51	\$6,569,248.10	
account	1,661.61		1,661.61	
	\$5,061,015.20	\$1,509,894.51	\$6,570,909.71	

(Here follows one paster, side folio 3615)

[fol. 3615]

December 31, 1931

											6			
Time	Adjusted	Increase by Company's	Total	Rights- L	ands and		Lines		Measuring	•	Measuring		Engineering,	
Line  "A" System. "B" System. "2-B" System. "C" System. "F" System. "G" System. "H" System. "J" System. "K" System. "M" System. "M" System. "M" System. "Number System. Sundry Adjustments.	Book Cost \$4,346,598.14 1,245,254.12 1,978,991.93 642,521.25 1,942,645.95 840,478.55 2,200,477.98 1,602,009.99 666,559.31 6,066,438.98	Revaluation \$2,317,559.54 1,137,633.84 	Per Books \$6,664,157.68 2,382,887.96 1,978,991.93 1,242,898.04 2,759,431.38 1,635,201.01	of-Way \$46,661.24 \$19,979.80 \$23,199.44 \$12,088.51 \$54,340.46 \$22,053.26 \$32,160.05 \$16,677.37 \$8,428.21 \$75,916.43 \$65,165.34 \$40,646.09	ands and easeholds \$3,764.52 1,692.68 2,393.54 4,470.20 1,553.39 2,227.17 1,166.65 2,696.03 6,528.62 6,118.55 4,813.30 5,59.48 995.18	Pipe \$2,860,642.56 729,174.56 1,256,201.65 353,282.94 1,136,374.60 442,225.93 1,166,285.92 918,186.54 351,214.95 3,576,399.91 2,191,121.91 1,023,542.99 3,510,607.53 423,024.83 994,970.06	Fittings \$287,871.83 121,571.75 9,369.83 44,421.70 29,143.78 85,356.92 178,670.82 114,076.55 52,503.84 353,522.74 72,215.72 76,621.41 337,559.37 49,641.25 42,554.69 1,246.01*	Construction \$935,980.53 316,493.27 507,686.58 159,030.93 585,303.98 240,224.35 659,585.68 430,445.35 201,848.42 1,932,350.97 1,149,516.46 600,981.72 1,532,065.75 207,690.35 531,294.59	Station Structures \$9,532.97 9,530.04 520.99 10,858.30 16,065.56 3,974.59 5,457.89 12,955.53 249.49 577.72 4,953.06 848.38	Other Structures \$94,021.67 6,120.44 5,204.05 5,745.73 16,428.08 3,737.95 71,918.98 98,073.75 6,700.48 19,915.60 29,525.50 3,363.03 47,809.07 441.56 696.64	Station Equipment \$32,243.21 29,352.62 4,763.48 35,587.85 44,093.04 20,182.80 20,260.23 22,651.91 25,655.56 51,241.87 67,642.20 42,353.90 102,470.34 4,606.28 26,599.88	Other Equipment \$37,228.85 9,417.49 10,157.37 12,053.28 19,252.30 7,998.97 38,149.73 15,426.52* 12,769.48 31,193.40 67,286.02 29,556.18 93,480.98 13,713.79 61,681.57*	Interest and Other Overheads \$38,650.76 1,921.47 161,888.54 7,058.47 37,173.95 13,170.39 25,761.51 3,202.86 4,742.34 19,119.89 6,427.35 1,619.73 27,590.94 906.29 7,603.34	
Completed Construction— "Work in Progress"	\$35,052,885.04 31,516.13	\$13,706,438.86	\$48,759,323.90 . 31,516.13	<b>\$</b> 554,383.25 <b>\$</b> 43	3,994.11	\$20,933,256.88	\$1,853,856:19	\$9,990,498.93	\$75,500.34	\$409,702.59	\$529,705.17	\$305,149.75	\$356,837.83	
	\$35,084,401.17	\$13,706,438.86	\$48,790,840.03	* Indicates red figures.				*.						

## Plaintiffs' Exhibit No. 5—Continued

[fol. 3616]

### Real Estate

## Lone Star Gas Company—Dallas, Texas

December 31, 1931

*	Adjusted	Increase By Company's	Total
	Book Cost	Revaluation	Per Books
General Office Building Site			9
80 x 90 feet at Northwest corner of			
Wood and Harwood Streets in		*** ***	
Block 98½ City of Dallas, Texas	\$44,502.87	<b>\$</b> 18,986.00	\$63,488.87
Dallas Machine Shop Site			
150 x 227 feet Block 866, City of		. **	
Dallas, Texas: Lots 1, 13, 14, Block	1000		
866, City of Dallas, Texas; Lot 15,	F		*
866, City of Dallas, Texas; Lot 15, Block 866, City of Dallas, Texas.	\$19,574.21	\$16,056.19	\$35,630.40
Lots 2, and 3, Block 866, City of			
Dallas, Texas, (Dallas Machine		,*	
Shop)	6,512.41		6,512.41
	26 086 62	16,056.19	42,142.81
Vacant Property	20,000.02	10,000.15	10,110.01
70x80 feet, Block 981/2, City of Dallas,			
Texas, fronting 70 feet on North			
side of Wood Street and extending			
back approximately 80 feet towards			
Jackson Street	18,051.35	8,226.07	26,277.42
Property Sold to Dallas Gas Company			
on Which Revaluation Was Not			
Removed From Books		1.1	
100 x 90 feet at Southwest corner of			
Harwood and Jackson Streets, in			
Block 98½, City of Dallas, Texas.		\$24,951.50	\$24,951.50
70 x 90 feet in Block 981/2, City of	1	-	
Dallas, Texas, fronting 70 feet on			
South side of Jackson Street and	. \		
extending back 90 feet towards Wood Street.		11,229.71	11,229.71
Wood Street		11,229.11	11,229.71
		36,181.21	36, 181.21
	\$88,640.84	\$79,449.47	\$168,090.31
	700,010.01	10,110.11	4100,000.01

(Here follow 2 pasters, side folios 3617, 3718-19)

Summary of Public Service Property

Lone Star Gas Company—Dallas, Texas

For the twelve months periods ended

		4. 6		z or one on	cive monens perio	as chaca			
Adjusted Book Cost	3-31-1934	12-31-1933	12-31-1932	12-31-1931	12-31-1930	12-31-1929	12-31-1928	12-31-1927	1-1-1927
Leases	* **********	*********	\$1,100,964.23	\$1,260,569.86	\$1,359,938.91	\$1,182,139.79		\$264,793.42	\$223,760.53
Mineral Rights Gas Rights Lands in Fee—Clay County, Texas	**********		66,922.61	14,795.25				<b>*</b>	
Lands in Fee-Clay County Tevas			22,436.48 38,110.70	21,974.48 27,344.70			27, 225, 20	27,225.20	27,225.20
Lands in Fee-Limestone County, Texas	**********	* * * * * * * * * * * * * * *	3,003.00	3,003.00		3,003.00		3,003.00	3,003.00
Lands in Fee—Limestone County, Texas			10,878.27	10,878.27	10,878.27	10,878.27	10,878.27	10,878.27	10,878.27
Lands in Fee—Grady County, Oklahoma			254 23	,0,000.20				10,010.21	10,010.21
Lands in Fee-Eastland County, Texas		************						5,172.16	5,172.16
Drilling Tools			106,091.00	116,995.56	130,363.30	165,390.41	157,632.20	200,504.27	183,028.66
Production System Property—Gas Farms	******		4,660,941.28	3,300,240.16	2,995,826.25	2,031,018.48	919,609.39	671,022.66	527,107.73
Gathering System PropertyPetrolia Field Account	************	**********	1,483,952.02	1,129,890.23	541,689.24	142,782.73	135,232.43	135,337.59	136,619.80
Compressor Station Property	* **********	*********	5,062,428.60	758,619.23		789,237.25	785,953.58	755,320.63	670,009.73
Transmission System Property—Pipe Lines and Equip-	*********	*********	3,002,428.00	5,001,015.20	, 176, 266.46	4,723,430.22	4,778,613.36	4,501,081.42	4,081,161.99
ment			36.263.983.13	35.084.401.17	35,685,325.24	34,299,974.09	28,789,533.60	26,025,621.69	18,759,905.44
Gas Connections			15.215.42	15,050.78		32,795.76	26,638.93	20,020,021.00	10,100,000.11
Telephone and Telegraph System			383,199.63	360,841.23	356,382.08	350,818.77	325,345.62	214,686.58	134,107.90
Automotive Equipment Dallas Machine Shop		* * * * * * * * * * * * * *	363,470.69	389,241.48	423,195.48	439,109.58	299,824.48	280,084.22	139,061.95
Dallas Machine Shop	********	* * * * * * * * * * * * * *	132,618.98	131,862.70	132,130.83	136,758.18	109,909.13		***********
Real Estate	***********	* * * * * * * * * * * * * * *	88,640.84	88,640.84	88,640.84	178,768.53	178,768.53	128,065.08	111,172.47
Ceneral Office Furniture and Firstures			491,492.10	468,772.79	468,887.79	468,322.23	464,216.50	461,113.88	190,604.16
General Office Furniture and Fixtures.  Tools and Construction Equipment	**********		206,189.37 13,784.40	198,408.01 12,607.40	158,058.74 14,131.50	134,010.47	109,746.30	88,343.16	60,685.94
, 10018 and Construction Equipment			10,704.40	12,007.40	14,101.00	11,000.10			**********
TotalRevaluation	\$50,325,548.93	\$50,283,644.65	\$50,514,576.98	\$48,455,152.34	\$48,362,852.13	\$45,128,441.56	\$37,551,604.69	\$33,772,253.23	\$25,263,504.93
Per Company's Books	16,492,486.05	16,492,486.05	18,811,539.67	18,220,415.98	18,522,464.06	9,728,461.08	9,728,461.08	9,793,783.28	9,803,860.00
Grand Total	\$66;818,034.98	\$66,776,130.70	\$69,326,116.65	\$66,675,568.32	\$66,885,316.19	\$54,856,902.64	\$47,280,065.77	\$43,566,036.51	\$35,067,364.93

[fol. 3618-3619]

Summary of Depreciation Reserves Lone Star Gas Company-Dallas, Texas

From January 1, 1927, to Dec. 31, 1933, both inclusive

		Total	Drilling Tools	Production System Property	Transmission & Gathering Systems	Compressor Station Property	Telephone & Telegraph System	*Automotive Equipment	Dallas Machine Shop	General Office Building	Office Furniture and Fixtures	Tools and Construction Equipment	
	Balance per books at January 1, 1927  Depreciation set up for the year 1927	\$8,294,762.08 1,280,856.10	\$136,003.37	\$61,592.54 15,218.65	\$6,516,967.66 961,307.92	\$1,479,317.70 204,721.71	\$28,199.12 9,620.93	\$55,752.78 70,927.55	\$	\$8,811.87 16,351.70	\$8,117.04 3,327.64		
	Net reduction to the reserve for the year	9,575,618.18 245,097.73	136,003.37 566.44	76,811.19 1,609.86	7,478,275.58 184,461.32	1,684,039.41 12,598.44	37,2	126,680.33 44,519.99		25,163.57	11,444.68 1,341.68		
	Balance per books at December 31, 1927 Depreciation set up for the year 1928	9,330,520.45 1,198,192.50	135,436.93 15,515.82	75,201.33 20,099.01	7,293,814.26 868,874.24	1,671,440.97 150,129.48	37,200.05 8,399.51	82,160.34 111,799.49	· i	25,163.57 18,074.36	10,103.00 5,300.59		
	Net reduction to the reserve for the year	10,528,712.95 260,768.59	150,952.75 49,724.75	95,300.34 13,075.07	8,162,688.50 140,047.99	1,821,570.45 32,081.28	45,599.56	193,959.83 23,181.08		43,237.93	15,403.59 2,658.42	*	
,	Balance per books at December 31, 1928	10,267,944.36 1,190,062.06	101,228.00 16.534.04	82,225.27 32,444.26	8,022,640.51 869,092.38	1,789,489.17 128,907.34	45,599.56 12,750.75	170,778.75 97,217.28	7'973.03	43,237.93 18,558.21	12,745.17 6,584.77		
	Depreciation set up for the year 1929 Net reduction to the reserve for the year	11,458,006.42 450,335.00	117,762.04 9,335.63	114,669.53 7,548.09	8,891,732.89 151,122.72	1,918,396.51 197,117.96	58,350.31	267,996.03 82,597.97	7,973.03	61,796.14 950.00	19,329.94 1,662.63		
	Balance per books at December 81, 1929 Depreciation set up for the year 1930	11,007,671.42 580,022.80	108,426.41 13,036.33	107.,121.44 64,369.60	8,740,610.17 269,957.57	1,721,278.55	58,350.31 2,537.13	185,398.06 167,617.17	7,973.03 5,131.47	60,846.14 18,695.27	17,667.31 8,041.06	340.30	
	Net reduction to the reserve for the year	11,587,694.22 464,875.93	121,462.74 45,360.65	171,491.04 11,758.80	9,010,567.74 208,513.40	1,751,575.45 77,139.62	60,887.44	353,015.23 117,965.06	13,104.50	79,541.41 1,118.03	25,708.37 3,020.37	340.30	
	Balance per books at December 31, 1930 Depreciation set up for the year 1931	11,122,818.29 1,841,779.67	76,102.09 11,699.56	159,732.24 114,313.21	8,802,051.34 1,351,493.48	1,674,435.83 200,116.40	60,887.44 17,689.36	235,050.17 113,113.82	13,104.50 6,932.16	78,423.38 18,518.75	22,688.00 7,902.93	340.30	
	Net reduction to the reserve for the year	12,964,597.96 720,014.28	87,801.65 14,295.20	274,045.45 37,136,58	10,153,547.82 449,902.77	1,874,552.23. 167,740.62	78,576.80 257.44	348,163.99 48,644.91	20,036.66 16.00	96,942.13	30,590.93 1,816.58	340.30 204.18	
	Balance per books at December 31, 1931 Depreciation set up for the year 1932	12,244,583.68 1,841,508.16	73,506.45 10,609.10	236,908.87 174,291.10	9,703,645,05 1,346,683.85	1,706,811.61 210,280.46	· 78,319.36 18,883.20	299,519.08 45,424.04	20,020.66 6,900.72	96,942.13 18,515.29	28,774.35 9,920.40	136.12	
	Net reduction to the reserve for the year	14,086,091.84 **62,725.18	84,115.55 12,584.26	411,199.97 28,594.70	11,050,328.90 **192,153.76	1,917,092.07 36,907.76	97,202.56	344,943.12 41,833.68	26,921.38	115,457.42 8,344.28	38,694.75 1,163.90	136.12	
	Balance per books at December 31, 1932 Depreciation set up for the year 1933	14,148,817.02 1,882,333.41	71,531.29 8,490.19	382,605.27 192,080.54	11,242,482.66 1,394,433.12	1,880,184.31 210,069.11	97,202.56 18,949.67	303,109.44 21,882.38	26,921.38 6,924.65	107,113.14 19,194.28	37,530.85 10,309.47	136.12	
	Net reduction to the reserve for the year	16,031,150.43 335,736.55	80,021.48 20,833.55	574,685.81 11,971.30	12,636,915.78 189,032.45	2,090,253.42 65,845.35	116,152.23 1,635.07	324,991.82 43,032.61	33,846.03	126,307.42 29.65	47,840.32 3,350.32	136.12 6.25	
	Balance per books at December 31, 1933	\$15,695,413.88	\$59,187.93	\$562,714.51	\$12,447,883.33	\$2,024,408.07	\$114,517.16	\$281,959.21	\$33,846.03	\$126,277.77	\$44,490.00	\$129.87	

<sup>\*</sup> All figures reduced by 5½%, representing the proportion of automotive equipment determined to be non-public service property.

\*\* Indicates red figures.

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[fol. 3620] Plaintiffs' Exhibit No. 6 [fol. 3621] Lone Star Gas Company

Texas Gathering, Transmission, Compressing and General Property

#### Reproduction Cost New Appraisal

June 15, 1934

# Hawley, Freese and Nichols

#### J. A. Phillips Co.

[fol. 3622] Table of Contents	
	Side folio
Summary	3623
Gathering System Property:	
Rights of Way	
Field Measuring Station Structures	3626
Field Measuring Station Equipment	
Field Line Equipment	3628
Transmission System Property:	
Transmission Measuring Station Land	3629
Transmission Measuring Station Leaseholds	
Other Transmission System Land	3632
Other Transmission System Leaseholds	. 3633
Rights of Way	3634
Transmission System Measuring Station Stru-	c-
tures	3636
Other Transmission System Structures	. 3639
Transmission System Measuring Station Equip	0-
ment	. 3640
Transmission Line Equipment	3643
Compressing System Property:	
Compressing Stations	3646
General System Property:	
General Office Land	3647
Other General Land	
General Office Structure	
Other General Structures	The second second
General Office Furniture and Fixtures	
Other General Furniture and Fixtures	3652
General Shop Equipment	
General Tools	3654

Plaintiffs' Exhibit No. 6-Continue	d
General System Property—Contd.	
Automotive and Construction Equipment	3655
General Telephone System	
Non-Physical Properties:	
Administrative and Legal Expenses During	r Con-
struction	3659
Engineering and Supervision During Con	etrna
tion	3659
Taxes During Construction	
Interest During Construction	
Preliminary and Organization Expenses	
Working Capital	
working Capital	0002
[fol. 3623] Texas Gathering, Transmission, Compressing,	
and General System Property	
Reproduction Cost New	
June 15, 1934	
Summary .	
Gathering System Property Rights of Way	\$9,179.61
Field Measuring Station Structures	27,319.78
Field Measuring Station Equipment	93,943.02
ried Line Equipment	789,328.10
Transmission System Property	919,770.51
Transmission Measuring Station Land	82,596.45
Transmission Measuring Station Leaseholds	8,678.26
Other Transmission System LandOther Transmission System Leaseholds	21,102,59 863.74
Rights of Way	899,090.73
Rights of Way Transmission System Measuring Station Structures	131,951.63
Other Transmission System Structures Transmission System Measuring Station Equipment	90,355.40 372,610.06
Transmission Line Equipment	27,052,546.81
	28,659,795.67
Compressing System Property	
Compressing Stations	4,146,111.57
General System Property	
General Office LandOther General Land.	38,308.70 42,375.53
General Office Structure.	276,436.36
Other General Structures	40,239.02
General Office Furniture and FixturesOther General Furniture and Fixtures	178,537.58 10,371.57
[fol. 3624]	
General Shop Equipment	89,440.23
General ToolsAutomotive and Construction Equipment—Net	113,132.76
General Telephone System	72,711.13 261,919.77
raj.	1,123,472.65
A Company of the Comp	1,120,412.00

	Non-Physical Properties	
	Administrative and Legal Expenses During Construction.	\$687,874.26
	Engineering and Supervision During Construction	1,705,863.84
	Taxes During Construction	8,500.00
	Interest During Construction	1,522,468.89 194,005.00
	Working Capital.	1,289,000.00
,		5,407,711.99
	Total—Texas Gathering, Transmission, Compressing and General System Property	40,256,862,39
	[fol. 3625] Gathering System Rights of Way	
	Field:	
	Pottsboro	132.60
	Panhandle	
	West Texas	
		- 4
	Total	9,179.61
	[fol. 3626] Field Measuring Station Structures	
	Field:	
	Panhandle	8,745.96
	Pottsboro	51.52
	West Texas	
	Gas Purchase Stations	
	das Turchase Stations	. 0,110.02
	Total	27,319.78
	Total	. 21,013.10
	[fol. 3627] Field Measuring Station Equipment	*
	Field:	4
	Panhandle	36,493.11
	Pottsboro	,
	West Texas	
	Gas Purchase Stations	7,777.48
	Total	02 042 00
	Total	. 93,943.02
	[fol. 3628] Field Line Equipment	-
	Field:	
	Panhandle	205,731.85
	Pottsboro	444.36
	West Texas	
	west lexas	583,151.89
	Total	789,328.10
	10tal	. 100,020.10

[fol. 3629] Transmission Measuring Station Land	
A System	
A-1-1 Oklaunion	
A-3 Harold 299.33	
A-4 Vernon	
A-6 Chillicothe 313.66 A-10 Electra 175.00	
170 210010	\$1,364.88
B System	
	4,513.34
C System	1,590.69
E System .	
E Clarkesville	
E-1 Denison	
E-6 Bonham 749.63	
E-7 Honey Grove 242.47	
E-8 Dodd City	
E-10 Melissa	
E-10-5 Howe	
E-10-5-1 Van Alystne 434.51 E-10-6-1 Savoy 364.47	
E-11 Windon	
E-12 Brookston 357.41	
E-13 Petty	
E-14 Roxton	
E-17 Ravenna. 247.49	
E-18 Paris 529.90	
E-19 Blossom	
E-20 Detroit	
E-22-1 Deport 347.91	
E-22-2 Fulbright	
E, E-1 & E-2 Jct	0 000 70
	8,900,70
F System	3,201.37
[fol. 3630]	
G System	
G-3, St. Jo	
G-3-1, Lindsey	
G-3-2, Myra	*
0 0 0, Machinett	1,278.73
J System	6,062.22
K System	8,697.85
L System.	15,495.09
M System.	8,441.47
O System	19,774.57
R System	1,426.99
Numbered System	1,848.55
Total	82,596.45

I latifullis Likillott 100. 0 Continue	
[fol. 3634] Transmission Measuring Station	
Leaseholds	
A System	
	5.94
	3.56
A-5, Tolbert	9.03
	0.40
A-12, E. Wichita Falls	7.45 \$1,389.38
B System	
E System	* 02
	7.35
E-10-1, Ector	9.57
	2.05 9.69
	2.19
E-10-6, Bolls	7.10
	2.24
E-& E-7, Junction	3.77
	1,283.96
F System	184.01
J System	170.17
K System	
L System	
M System	
O System.	2,056.84
R System	
Numbered System	
Total	8,678.26
[fol. 3632] Other Transmission System Land	
Line	
A Shamrock Whse Site	
A North Pease River Crossing	
A South Pease River Crossing	50.00
A Salt Fork of Red River Bridge	50.00
A Vernon Camp Site	3,187.90 575.00
A & A-2 Gate Valve Site.  B Cottage Site, Clay Co.  B-7 North Fort Worth Whee Site	287.50
B-7 North Fort Worth Whse Site	1,569.62
C Old Irving Compressing Station Site	460.00
C Irving Whise Site	125.00
C Irving Whse Site	1,998.65
K & KA Lipan Whse Site	1,019.19
K & KC Ranger Whse Site	460.00
KBA Foremans Cottage Site	75.00
KC Abilene Whse Site4	999.60
KP Field Foreman's Cottage Site	175.00
KD Lot Adjoining X-Ray Whse	258.75
L Waco Whse Site	
L Brazos River Bridge Site	345.00
L Brazos River Bridge Site	230.00
M L&M Junct. Site	351.90

	Flaintins Exhibit No. 6—Continued	
	Other Transmission System Land-Contd.	
Line		
M	Richland Cottage Site	\$345.00
0	Brazos River Bridge West Site	230.00
0	Joshua Whee Site	693.15
18	Moran Whee Site	963.42
18 & KC	Cleaner Site.	343.89
33	Eastland Whie Site	.682.42
Tota	L	\$21,102.59
[fol. 3633]	Other Transmission System Leaseholds	
A	Line Walkers Shack Site, Hardeman Co	. \$21.25
A	Line Walkers Shack Site, Wheeler Co	
В.	Bowie Junction Site	
E	Gas Cleaners Site, Fannin Co.	
E	Gainesville Jct. Storage Lot	
F	Line Walkers Shack Site, Denton Co	
O&K	Brazos River Bridge Site.	
Tota	1	
[fol. 3634]	Transmission System Rights of Way	. 4000.71
	Translation of trong angles of tray	/.
A System	50 770 0 mda @ 0050	EA 417 CO
	e	54,417.60 1,564.81
	Lines	9,304.95
	idge Company	28,000.00
B System	39,171 9 rods @ .9268	36,304.52
2nd B Syste	em	28,999.48
C System		11,906.51
E System		
	Tap Lines	67,860.67 2,976.47
F System.	42,476.7 rods @ .9268	39,367.41
G System.	6,908.9 rods @ .9268	6,403.17
		368.68
J System		13,411.08
K System		
	Tap Lines	114,684.18 33,414.35
L System		
'Main and	Tap Lines	118,355.23.
Gathering	Lines	1,264.10
M System.		70,541.90

I families Damoit	No. 0—Continu	eu	
[fol. 3635]			
Transmission System F	lights of Way-Cont	d.	
O System			
Main and Tap Lines	154,408.6 rods @ .	0969	£149 105 90
Gathering Lines	16,478.5 rods @ .		13,715.06
	10,110.01040 @ .	0020	10,110.00
R System			
Main and Tap Lines	21,453.4 rods @ .		19,883.01
Gathering Lines	6,344.9 rods @ .	8323	5,280.86
Numbered System	72,940.7 rods @ .	8323	60,708.55
T.P.U. System	20,728.4 rods @ .	8323	17,252.25
Total			889,090.73
			000,000.10
[fol. 3636] Transmission System Measu	wing Station Standard		
Transmission System Meast	iring otation otructur	es	
A System			
A Iowa Park Road No. 1	\$10	08.36	
A Iowa Park Road No. 2		33.49	
A Petrolia Gardens		33.71	
A Wichita Falls Road		19.80	
A-1-1 Oklaunion		8.23	
A-2 Iowa Park		01.39	
A-4 Vernon.		3.01 6.58	, .
A-5 Tolbert		15.77	
A-6 Chillicothe		8.99	
A-10 Electra		55.61	
A-11 N. Wichita Falls	18	34.88	*
A-12 E. Wichita Falls		73.73	
A-13 Burkburnett		5.41	
A Electra Prod. Co		0.11	
A Sta. 2 ÷ 86 Petrolia	10	32.89 36.58	
A Sta. 4980 ÷ 99, Quanah		0.91	
A Vernon		2.33	
A Sta. 763 ÷ 60, Wichita Falls		34.58	
A-1 Sta. 67 ÷ 31, Oklaunion	`8	4.44	
	6. T		\$4,560.80
B System			5,847.17
C System	*************		6,366.59
E System			
E Clarkesville	.,	6.11	Α,
E-1 Denison		5.69	
E-2 Sherman	26	3.24	
E-3 Whitesboro		2.33	
E-6 Bonham		6.44	
E-7 Honey Grove	92	4.30	* *
E-8 Dodd City E-9 Gainesville Motor House	90	0.69	
E-9 Gainesville Regular House	21	$2.68 \\ 3.17$	14
E-10 Melissa	55	7.14	
E-10-1 Ector		5.75	
E-10-2 Whitewright		9,10	
[folio 3637] E-10-3 Trenton		7-02	
E-10-4 Westminster		4.42	
E-10-5 Howe E-10-5-1 Van Alvstne		7.75	
LICATED VAIDALVAIDE		8.45	

manufacture and the second and		
Transmission System Measuring Station St E System—Contd.	ructures—(	Contd.
E-10-6-1 Savoy	\$198.02	
E-10-7 Anna	235.23	,
E=11 Windom	210.12	
E-12 Brookston E-13 Petty	218.63	
E-14 Hoxton	224.25	
E-15 Collinsville	241.25	
E-17 Ravenna E-18 Paris	421.87	
· E-19 Blossom	568.50	
E-20 Detroit	560.48	*
E-21 Bagwell E-22-1 Deport.	518.14	
E-22-2 Fulbright	501.70	
E-4 Gainesville G.S.T.S. Regulator House No. 1 E-4 Gainesville G.S.T.S. Regulator House No. 2	82.56	4
E-4 Gainesville G.S.T.S. Meter House	58.40	
E Denison-Paris Jct	150.65	
E Gainesville Jct. Gravitometer House E Gainesville Jct. Meter House	78.61	
E Gainesville Jct. Regulator House	341.09	
E Near Honey Grove Tap	119.22	
E Near Tap to Sherman:	19.35	\$12,925.67
F System		
	********	4,329.20
G-3 St. Jo. G-3-1 Lindsey		
G-8-2 Myra	.: 533.84	
Q-3-3 Muenster	509.24	
G-1 Empire State, Gainesville	178.19	\$2,326.66
[fol. 3638]	(	42,020.00
H System.	/ '	J .
H-1 Byers Meter House		
H-1 Byers Regulator House		
H-2 Petròlia Meter House	80.87	
		\$230.87
J System		5,462.28
K System		15,944.69
L System		24,632.39
M System		10,931.12
O System		30,534.57
R System		2,090.42
Numbered System		4,381.75
Government 10" Line		205.73
T P U System		1,181.72
Total		\$131,951.63

	t lamenta Exhibit No. 0—Continued	
	[fol. 3639] Other Transmission System Structures	
	A System	\$17,813.67
	B System	14,036.43
	C-System	8,995.92
	E System	4,369.43
	H System	4,000.40
	Byers Cleaner House	
	Petrolia Cottage No. 41	
		1,414.78
	J System	12,638.99
	K System	16,454.55
	L System	6,059.79
	M System	8,174.19
	O System	397.65
	<sup>4</sup> Total	\$90,355.40
	[fol. 3640]	450,000.40
	Transmission System Measuring Station Equipment	
	A System	
	A Iowa Park Road No. 1	
	A Petrolia Gardens	
	A Wichita Falls, Charlie Road	
	A-1-1 Oklaunion	
	A-2 Iowa Parl 980.17 A-3 Harrold 823.71	
	A-4 Vernon	
	A-5 Tolbert: 508.71	
	A-6 Chillicothe 1,018.13 A-10 Electra 1,597.17	
	A-11 N. Wichita Falls	
	A-12 E. Wichita Falls	
	A-13 Burkburnet. 239.86 A Electra Prod. Co. 709.03	
	A Electra 448.59	
	A Hollis, Okla	
	A Petrolia	-4 11
	A Vernon: 145.05	
	A Wichita Falls 162.90 A-1 Oklaunion 262.96	
	A-1 Okiaumon	\$14,955.01
	B System	22,685.72
	C System	19,401.22
	E System	10,101.22
-	E Clarkesville	
	E-1 Denison	4
	E-2 Sherman	
	E-3 Whitesboro 1,230.89 E-6 Bonham 1,266.06	
	E-7 Honey Grove	/
	E-8 Dodd City	1
	E-9 Gainesville Regulator House 620.01	1.
	E-10 Melisse 684.27	1
	E-10-1 Ector	1
	·	

[fol. 3641]

Transmission System Measuring Station Equipment (Cont'd)

	(Cont u)		
E System (Cont'd)			
		\$1,014.21	
		752.61	
E-10-4 Westminster		619.64	
		701.37	
		1,096.59	
		738.97	
		738.39 $758.62$	
		690.25	
E-12 Brookston		664.34	
		697.62	
E-14 Roxton		858.05	
E-15 Collinsville		1,061.06	
		728.13	
		1,734.95	
		1,221.27	
E-21 Bagwell		707.49	
E-22-1 Deport		1,209.97	
E-22-2 Fulbright		684.05	4
E-4 Gainesville G.S.T.S.	Regulator House No. 1	108.11	
E-4 Gainesville G.S.T.S.	Regulator House No. 2	275.87	
E-4 Gainesville G.S.T.S.	Meter House	441.41	
E Gainesville Jct. Gravit	ometer House	450.93 265.36	
	House	1,765.01	
E Denison Paris Jet.	tol House,	44.92	
E Near Honey Grove Ta	p	105.31	
E Near Tap to Sherman.			
			<b>\$35,447.44</b>
F System			17,146.50
[fol. 3642]			
G System			
		1,525.04	
		722.78	
G-3-2 Myra		733.48	
G-3-3 Muervster		806.47	
G-1 Empire State, Gaine	esville	650.90	04 400 07
II Contact			\$4,438.67
H System		700 04	
		760.94	
	ousese	128.68 $759.88$	
	House	103.51	
H & H2 Merrick & Gold	smith, Petrolia		
			1,827.07
J System			23,368.79
K System			30,299.12
			59,787.73
			43,754.15
			68,613.86
			4,651.82
Numbered System			17,710.75
Government 10" Line			830.64
TPU System			7,691.57
	*		000 010 00
Total			372,610.06

Transmission Line Equipment   Saystem   Transmission Line Equipment   Exclusive of Excavation   Saystem   347,016.5 Cy @ .375.   130,131.19   Hand Excavation   1,343.2 Cy @ 1.31.   1,779.39   Rock Excavation   28,618.8 Cy @ 3.50.   100,165.80				
A System  Transmission Line Equipment Exclusive of Excavation Machine Excavation 347,016.5 Cy @ .375. 130,131.19 Hand Excavation 1,343.2 Cy @ 1.31. 1,759.59 Rock Excavation 28,618.8 Cy @ 3.50. 100,165.80  B System  Transmission Line Equipment Exclusive of Excavation 2,974,018.44 Machine Excavation 281,137.1 Cy @ .375. 105,426.41 Hand Excavation 1,803.4 Cy @ 1.31. 2,802.45 Rock Excavation 30,375.5 Cy @ 3.50. 106,314.25  C System  Transmission Line Equipment Exclusive of Excavation 536,252.69 Machine Excavation 45,910.0 Cy @ .375. 17,116.25 Hand Excavation 45,910.0 Cy @ .375. 17,116.25 Hand Excavation 15,621.3 Cy @ 1.31. 20,463.90 Rock Excavation 1,405.5 Cy @ 3.50. 120,463.90 E System  Transmission Line Equipment Exclusive of Excavation 1,370,105.96 Machine Excavation 2,330.4 Cy @ 1.31. 3,052.82 Rock Excavation 2,330.4 Cy @ 1.31. 3,052.82 Rock Excavation 2,330.4 Cy @ 1.31. 3,052.82 Rock Excavation 3,561.5 Cy @ 3.50. 12,465.25  F System  Transmission Line Equipment Exclusive of Excavation 986,588.81 Machine Excavation 126,544.2 Cy @ .375. 68,410.65 Hand Excavation 126,544.2 Cy @ .375. 14,454.08 Hand Excavation 126,544.2 Cy @ .375. 47,454.08 Hand Excavation 25,7 Cy @ 1.31. 3,099.90  I,044,772.52  [fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63 Machine Excavation 2,971.4 Cy @ 3.50. 10,399.90  I,044,772.52  [fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63 Machine Excavation 45,45.9 Cy @ .375. 5,555.96 Hand Excavation 45,4 Cy @ .375. 5,555.96 Hand Excavation 45,4 Cy @ .375. 5,555.96 Hand Excavation 45,4 Cy @ .375. 7,36.63 Machine Excavation 45,4 Cy @ .375. 5,555.96 Hand Excavation 58,047.2 Cy @ .375. 21,767.70 Hand Excavation 311,9 Cy @ 1.31. 408.59 Rock Excavation 11,122.0 Cy @ .355. 3,3927.00	[fol. 3643]	Prenamission Line	Fauinment	*
Transmission Line Equipment Exclusive of Excavation \$3,255,171.87 Machine Excavation 347,016.5 Cy @ 3.75. 130,131.19 Hand Excavation 1,343.2 Cy @ 1.31. 1,759.59 Rock Excavation 28,618.8 Cy @ 3.50. 100,165.80 3,487,228.45 3,487,248,248.45 3,487,248.45 3,487,248.45 3,487,248.45 3,487,248.45 3,487,248.45 3,487,248.45 3,487,248.45 3,487,248.45 3,487,248.45 3			Equipment	
Machine Excavation         1347,016.5 Cy @ .375.         130,131.19           Hand Excavation         28,618.8 Cy @ 3.50.         100,165.80           Rock Excavation         28,618.8 Cy @ 3.50.         100,165.80           B System         3,487,228.45           Transmission Line Equipment Exclusive of Excavation         2,974,018.44           Machine Excavation         281,137.1 Cy @ .375.         105,426.41           Hand Excavation         1,803.4 Cy @ 1.31.         2,362.45           Rock Excavation         30,375.5 Cy @ 3.50.         106,314.25           Transmission Line Equipment Exclusive of Excavation         536,252.69           Machine Excavation         45,910.0 Cy @ .375.         17,216.25           Hand Excavation         15,621.3 Cy @ 1.31.         20,463.90           Rock Excavation         1,405.5 Cy @ .350.         4,919.25           E System         Transmission Line Equipment Exclusive of Excavation         1,370,105.96           Machine Excavation         12,324.84 Cy @ .375.         68,410.65           Hand Excavation         128,428.4 Cy @ .375.         68,410.65           Hand Excavation         128,428.4 Cy @ .375.         47,454.08           Hand Excavation         28,544.2 Cy @ .375.         47,454.08           Hand Excavation         2,971.4 Cy		ipment Exclusive	of Excavation	\$3,255,171,87
Hand Excavation   1,343.2 Cy @ 1.31.   1,759.59				
B System  Transmission Line Equipment Exclusive of Excavation  Machine Excavation 281,137.1 Cy @ .375. 105,426.41  Hand Excavation 1,803.4 Cy @ 1.31. 2,362.45  Rock Excavation 30,375.5 Cy @ 3.50. 106,314.25  C System  Transmission Line Equipment Exclusive of Excavation 536,252.69  Machine Excavation 45,910.0 Cy @ .375. 17,216.25  Hand Excavation 15,621.3 Cy @ 1.31. 20,463.90  Rock Excavation 1,405.5 Cy @ 3.50. 4,919.25  E System  Transmission Line Equipment Exclusive of Excavation 1,370,105.96  Machine Excavation 1,405.5 Cy @ 3.75. 68,410.65  Hand Excavation 2,330.4 Cy @ 1.31. 3,052.82  Rock Excavation 3,561.5 Cy @ 3.50. 12,465.25  F System  Transmission Line Equipment Exclusive of Excavation 986,588.81  Machine Excavation 26,544.2 Cy @ .375. 47,464.08  Hand Excavation 251.7 Cy @ 1.31. 329.73  Rock Excavation 2,971.4 Cy @ 3.50. 10,399.90  [10. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63  Machine Excavation 2,971.4 Cy @ 3.50. 10,399.90  [10. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63  Machine Excavation 4,815.9 Cy @ .375. 5,555.96  Hand Excavation 4,815.9 Cy @ .375. 5,555.96  Hand Excavation 4,815.9 Cy @ .375. 5,555.96  Hand Excavation 14,815.9 Cy @ .375. 5,555.96  Hand Excavation 4,815.9 Cy @ .375. 5,555.96  Hand Excavation 6.2 Cy @ .1.34 8.12  Rock Excavation 454.4 Cy @ 3.50. 1,590.40  64,691.11  H System  Transmission Line Equipment Exclusive of Excavation 2,359.52  Hand Excavation 540.0 Cy @ .1.31. 3,066.92  J System  Transmission Line Equipment Exclusive of Excavation 491,049.17  Machine Excavation 58,047.2 Cy @ .375. 21,767.70  Hand Excavation 311.9 Cy @ .375. 21,767.70  Hand Excavation 311.9 Cy @ .375. 3,066.92  J System		1,343.2 Cy	1.31	
B System  Transmission Line Equipment Exclusive of Excavation  2, 974, 018.44 Machine Excavation  1, 803.4 Cy @ 1.31. 2, 362.45 Rock Excavation  30, 375.5 Cy @ 3.50.  106, 314.25  C System  Transmission Line Equipment Exclusive of Excavation  Transmission Line Equipment Exclusive of Excavation  Transmission Line Equipment Exclusive of Excavation  Rock Excavation  15, 621.3 Cy @ 1.31. 20, 463.90 Rock Excavation  1, 405.5 Cy @ 3.50.  E System  Transmission Line Equipment Exclusive of Excavation  Rock Excavation  3, 361.5 Cy @ 3.75. 68, 410.65 Hand Excavation  2, 330.4 Cy @ 1.31. 3, 052.82 Rock Excavation  126, 544.2 Cy @ 3.75. 47, 404.08 F System  Transmission Line Equipment Exclusive of Excavation  P86, 588.81 Machine Excavation  126, 544.2 Cy @ 3.75. 47, 404.08 Hand Excavation  2, 971.4 Cy @ 3.50.  1, 044, 772.52  [fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation  Anchine Excavation  2, 971.4 Cy @ 3.50.  1, 044, 772.52  [fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation  Transmission Line Equipment Exclusive of Excavation  57, 536.63 Machine Excavation  4, 815.9 Cy @ 3.75. 5, 555.96 Hand Excavation  4, 815.9 Cy @ 3.75. 5, 555.96 Hand Excavation  4, 815.9 Cy @ 3.75. 5, 555.96 Hand Excavation  Transmission Line Equipment Exclusive of Excavation  57, 536.63 Machine Excavation  4, 815.9 Cy @ 3.75. 5, 555.96 Hand Excavation  57, 536.63 Anchine Excavation  7, 540.00  1, 044, 772.52  [fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation  7, 540.00  1, 64, 691.11  H System  Transmission Line Equipment Exclusive of Excavation  491, 049.17 Machine Excavation  3, 906.92  J System  Transmission Line Equipment Exclusive of Excavation  491, 049.17 Machine Excavation  1, 122.0 Cy @ 3.75. 3, 362.00 3, 3927.00	Rock Excavation	28,618.8 Cy @	3.50	100,165.80
Transmission Line Equipment Exclusive of Excavation 2,974,018.44 Machine Excavation 1,803.4 Cy @ 1.31. 2,362.45 Rock Excavation 30,375.5 Cy @ 3.50. 106,314.25 Rock Excavation 45,910.0 Cy @ .375. 17,216.25 Hand Excavation 45,910.0 Cy @ .375. 17,216.25 Hand Excavation 15,621.3 Cy @ 1.31. 20,463.90 Rock Excavation 1,405.5 Cy @ 3.50. 4,919.25 Fransmission Line Equipment Exclusive of Excavation 1,370,105.96 Machine Excavation 182,428.4 Cy @ .375. 68,410.65 Hand Excavation 2,330.4 Cy @ 1.31. 3,052.8 Rock Excavation 3,561.5 Cy @ 3.50. 12,465.25 Rock Excavation 2,330.4 Cy @ 1.31. 3,052.8 Rock Excavation 126,544.2 Cy @ .375. 47,454.08 Hand Excavation 2,371.4 Cy @ .375. 329.73 Rock Excavation 2,971.4 Cy @ .350. 10,399.90 1,044,772.52 Rock Excavation 2,971.4 Cy @ .350. 10,399.90 1,044,772.52 Rock Excavation 14,815.9 Cy @ .375. 5,555.96 Hand Excavation 454.4 Cy @ .350. 10,399.90 1,044,772.52 Rock Excavation 454.4 Cy @ .375. 10,399.90 1,044,772.52 Rock Excavation 58,047.2 Cy @ .375. 10,399.90 1,049.17 Rock Excavation 1,122.0 Cy @ .375. 10,399.90 1,049.17 Rock Ex	R System		4.	3,487,228.45
Machine Excavation       281, 137. 1 Cy @ 1.31       2,362.45         Rock Excavation       1,803.4 Cy @ 1.31       2,362.45         Rock Excavation       30,375.5 Cy @ 3.50       106,314.25         C System       3,188,121.55         Transmission Line Equipment Exclusive of Excavation       536,252.69         Machine Excavation       45,910.0 Cy @ .375       17,216.25         Hand Excavation       15,621.3 Cy @ 1.31       20,463.90         Rock Excavation       1,405.5 Cy @ 3.50       4,919.25         578,852.09       578,852.09         E System       Transmission Line Equipment Exclusive of Excavation       1,370,105.96         Machine Excavation       182,428.4 Cy @ .375       68,410.65         Hand Excavation       2,330.4 Cy @ 1.31       3,052.82         Rock Excavation       3,561.5 Cy @ 3.50       12,465.25         1,454,034.68       F       System         Transmission Line Equipment Exclusive of Excavation       986,588.81         Machine Excavation       251.7 Cy @ .375       47,454.08         Hand Excavation       2,971.4 Cy @ .375       5,555.96         Hand Excavation       14,815.9 Cy @ .375       5,555.96         Hand Excavation       454.4 Cy @ 3.50       1,590.40         64,691.11	Teameraterian Line Ferri	inment Evaluaire	of Everyntian	9 074 019 44
C System  Transmission Line Equipment Exclusive of Excavation  Transmission Line Equipment Exclusive of Excavation  As a constant of the excavation of the e	Machine Exception	281 137 1 Cv 6	a 375	
C System  Transmission Line Equipment Exclusive of Excavation  Transmission Line Equipment Exclusive of Excavation  As a constant of the excavation of the e	Hand Excavation	1.803.4 Cv 6	1.31	2.362.45
C System  Transmission Line Equipment Exclusive of Excavation  Transmission Line Equipment Exclusive of Excavation  As a constant of the excavation of the e	Rock Excavation	30,375.5 Cy	3.50	106,314.25
Transmission Line Equipment Exclusive of Excavation 536, 252.69 Machine Excavation 45,910.0 Cy @ .375. 17, 216.25 Hand Excavation 15,621.3 Cy @ 1.31 20,463.90 Rock Excavation 1,405.5 Cy @ 3.50 4,919.25 578,852.09 E System  Transmission Line Equipment Exclusive of Excavation 1,370,105.96 Machine Excavation 182,428.4 Cy @ .375. 68,410.65 Hand Excavation 2,330.4 Cy @ 1.31 3,052.82 Rock Excavation 3,561.5 Cy @ 3.50 12,465.25 1,454,034.68 F System  Transmission Line Equipment Exclusive of Excavation 986,588.81 Machine Excavation 126,544.2 Cy @ .375. 47,454.08 Hand Excavation 251.7 Cy @ 1.31 329.73 Rock Excavation 2,971.4 Cy @ 3.50 10,399.90 1,044,772.52 [fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63 Machine Excavation 14,815.9 Cy @ .375 5,555.96 Hand Excavation 454.4 Cy @ 3.50 1,590.40 64,691.11 H System  Transmission Line Equipment Exclusive of Excavation 2,359.52 J ,590.40 540.60 Cy @ 1.31 2,359.52 J ,590.40 540.60 Cy @ 1.31 3,066.92 J System  Transmission Line Equipment Exclusive of Excavation 2,359.52 J System  Transmission Line Equipment Exclusive of Excavation 2,359.52 J System  Transmission Line Equipment Exclusive of Excavation 2,359.52 J ,767.70 Hand Excavation 58,047.2 Cy @ .375 21,767.70 Hand Excavation 58,047.2 Cy @ .375 3.50 3,927.00				3,188,121.55
Machine Excavation         45,910.0 Cy @ 375         17,216.25           Hand Excavation         15,621.3 Cy @ 1.31         20,463.90           Rock Excavation         1,405.5 Cy @ 3.50         4,919.25           578,852.09         578,852.09           E System         7         1,370,105.96           Machine Excavation         182,428.4 Cy @ 375         68,410.65           Hand Excavation         2,330.4 Cy @ 1.31         3,052.82           Rock Excavation         3,561.5 Cy @ 3.50         12,465.25           1,454,034.68         12,465.25           F System         1         30,272.80           Transmission Line Equipment Exclusive of Excavation         986,588.81           Machine Excavation         251.7 Cy @ 1.31         329.73           Rock Excavation         2,971.4 Cy @ 3.50         10,399.90           1,044,772.52         1           [fol. 3644]         3         3           G System         7         5,555.96           Hand Excavation         14,815.9 Cy @ 375         5,555.96           Hand Excavation         454.4 Cy @ 3.50         1,590.40           64,691.11         46,691.11           H System         7         2,359.52           Transmission Line Equipm	C System			
E System  Transmission Line Equipment Exclusive of Excavation 1,370,105,96 Machine Excavation 182,428.4 Cy @ 375. 68,410.65 Hand Excavation 2,330.4 Cy @ 1.31. 3,052.82 Rock Excavation 3,561.5 Cy @ 3.50. 12,465.25  1,454,034.68  F System  Transmission Line Equipment Exclusive of Excavation 986,588.81 Machine Excavation 126,544.2 Cy @ 375. 47,454.08 Hand Excavation 251.7 Cy @ 1.31. 329.73 Rock Excavation 2,971.4 Cy @ 3.50. 10,399.90  1,044,772.52  [fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63 Machine Excavation 14,815.9 Cy @ 375. 5,555.96 Hand Excavation 6.2 Cy @ 1.34. 8.12 Rock Excavation 454.4 Cy @ 3.50. 1,590.40  64,691.11  H System  Transmission Line Equipment Exclusive of Excavation 2,359.52 Hand Excavation 540.0 Cy @ 1.31. 2,359.52 Transmission Line Equipment Exclusive of Excavation 2,359.52 Transmission Line Equipment Exclusive of Excavation 4,691.11  Transmission Line Equipment Exclusive of Excavation 2,359.52 Transmission Line Equipment Exclusive of Excavation 4,691.11  Transmission Line Equipment Exclusive of Excavation 4,691.17 Machine Excavation 58,047.2 Cy @ 375. 21,767.70 Hand Excavation 311.9 Cy @ 1.31. 408.59 Rock Excavation 1,122.0 Cy @ 3.50. 3,927.00	Transmission Line Equ	ipment Exclusive	of Excavation	536,252.69
E System  Transmission Line Equipment Exclusive of Excavation 1,370,105,96 Machine Excavation 182,428.4 Cy @ 375. 68,410.65 Hand Excavation 2,330.4 Cy @ 1.31. 3,052.82 Rock Excavation 3,561.5 Cy @ 3.50. 12,465.25  1,454,034.68  F System  Transmission Line Equipment Exclusive of Excavation 986,588.81 Machine Excavation 126,544.2 Cy @ 375. 47,454.08 Hand Excavation 251.7 Cy @ 1.31. 329.73 Rock Excavation 2,971.4 Cy @ 3.50. 10,399.90  1,044,772.52  [fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63 Machine Excavation 14,815.9 Cy @ 375. 5,555.96 Hand Excavation 6.2 Cy @ 1.34. 8.12 Rock Excavation 454.4 Cy @ 3.50. 1,590.40  64,691.11  H System  Transmission Line Equipment Exclusive of Excavation 2,359.52 Hand Excavation 540.0 Cy @ 1.31. 2,359.52 Transmission Line Equipment Exclusive of Excavation 2,359.52 Transmission Line Equipment Exclusive of Excavation 4,691.11  Transmission Line Equipment Exclusive of Excavation 2,359.52 Transmission Line Equipment Exclusive of Excavation 4,691.11  Transmission Line Equipment Exclusive of Excavation 4,691.17 Machine Excavation 58,047.2 Cy @ 375. 21,767.70 Hand Excavation 311.9 Cy @ 1.31. 408.59 Rock Excavation 1,122.0 Cy @ 3.50. 3,927.00	Machine Excavation	45,910.0 Cy (	<b>375</b>	17,216.25
E System  Transmission Line Equipment Exclusive of Excavation 1,370,105,96 Machine Excavation 182,428.4 Cy @ 375. 68,410.65 Hand Excavation 2,330.4 Cy @ 1.31. 3,052.82 Rock Excavation 3,561.5 Cy @ 3.50. 12,465.25  1,454,034.68  F System  Transmission Line Equipment Exclusive of Excavation 986,588.81 Machine Excavation 126,544.2 Cy @ 375. 47,454.08 Hand Excavation 251.7 Cy @ 1.31. 329.73 Rock Excavation 2,971.4 Cy @ 3.50. 10,399.90  1,044,772.52  [fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63 Machine Excavation 14,815.9 Cy @ 375. 5,555.96 Hand Excavation 6.2 Cy @ 1.34. 8.12 Rock Excavation 454.4 Cy @ 3.50. 1,590.40  64,691.11  H System  Transmission Line Equipment Exclusive of Excavation 2,359.52 Hand Excavation 540.0 Cy @ 1.31. 2,359.52 Transmission Line Equipment Exclusive of Excavation 2,359.52 Transmission Line Equipment Exclusive of Excavation 4,691.11  Transmission Line Equipment Exclusive of Excavation 2,359.52 Transmission Line Equipment Exclusive of Excavation 4,691.11  Transmission Line Equipment Exclusive of Excavation 4,691.17 Machine Excavation 58,047.2 Cy @ 375. 21,767.70 Hand Excavation 311.9 Cy @ 1.31. 408.59 Rock Excavation 1,122.0 Cy @ 3.50. 3,927.00	Hand Excavation	15)621.3 Cy (	0 1.31	
E System  Transmission Line Equipment Exclusive of Excavation 1,370,105.96 Machine Excavation 182,428.4 Cy @ 375. 68,410.65 Hand Excavation 2,330.4 Cy @ 1.31. 3,052.82 Rock Excavation 3,561.5 Cy @ 3.50. 12,465.25  1,454,034.68  F System  Transmission Line Equipment Exclusive of Excavation 986,588.81 Machine Excavation 126,544.2 Cy @ 375. 47,454.08 Hand Excavation 251.7 Cy @ 1.31. 329.73 Rock Excavation 2,971.4 Cy @ 3.50. 10,399.90  1,044,772.52  [fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63 Machine Excavation 14,815.9 Cy @ 375. 5,555.96 Hand Excavation 6.2 Cy @ 1.34. 8.12 Rock Excavation 454.4 Cy @ 3.50. 1,590.40  64,691.11  H System  Transmission Line Equipment Exclusive of Excavation 2,359.52 Hand Excavation 540.0 Cy @ 1.31. 707.40  3,066.92  J System  Transmission Line Equipment Exclusive of Excavation 491,049.17 Machine Excavation 58,047.2 Cy @ 375. 21,767.70 Hand Excavation 311.9 Cy @ 1.31. 408.59 Rock Excavation 1,122.0 Cy @ 3.50. 3,927.00	Rock Excavation	1,405.5 Cy (	y 3.50	4,919.25
Transmission Line Equipment Exclusive of Excavation 1,370,105.96 Machine Excavation 182,428.4 Cy @ .375. 68,410.65 Hand Excavation 2,330.4 Cy @ 1.31. 3,052.82 Rock Excavation 3,561.5 Cy @ 3.50. 12,465.25    1,454,034.68			jo .	578,852.09
Machine Excavation       182,428.4 Cy @ .375.       68,410.65         Hand Excavation       2,330.4 Cy @ 1.31.       3,052.82         Rock Excavation       3,561.5 Cy @ 3.50.       12,465.25         1,454,034.68         F System         Transmission Line Equipment Exclusive of Excavation       986,588.81         Machine Excavation       251.7 Cy @ .375.       47,454.08         Hand Excavation       2,971.4 Cy @ .350.       10,399.90         1,044,772.52         [fol. 3644]         G System         Transmission Line Equipment Exclusive of Excavation       57,536.63         Machine Excavation       14,815.9 Cy @ .375.       5,555.96         Hand Excavation       6.2 Cy @ 1.34.       8.12         Rock Excavation       454.4 Cy @ 3.50.       1,590.40         64,691.11         H System         Transmission Line Equipment Exclusive of Excavation       2,359.52         Hand Excavation       540.0 Cy @ 1.31.       2,359.52         J System         Transmission Line Equipment Exclusive of Excavation       491,049.17         Machine Excavation       58,047.2 Cy @ .375.	E System		1.	
Machine Excavation       182,428.4 Cy @ .375.       68,410.65         Hand Excavation       2,330.4 Cy @ 1.31.       3,052.82         Rock Excavation       3,561.5 Cy @ 3.50.       12,465.25         1,454,034.68         F System         Transmission Line Equipment Exclusive of Excavation       986,588.81         Machine Excavation       251.7 Cy @ .375.       47,454.08         Hand Excavation       2,971.4 Cy @ .350.       10,399.90         1,044,772.52         [fol. 3644]         G System         Transmission Line Equipment Exclusive of Excavation       57,536.63         Machine Excavation       14,815.9 Cy @ .375.       5,555.96         Hand Excavation       6.2 Cy @ 1.34.       8.12         Rock Excavation       454.4 Cy @ 3.50.       1,590.40         64,691.11         H System         Transmission Line Equipment Exclusive of Excavation       2,359.52         Hand Excavation       540.0 Cy @ 1.31.       2,359.52         J System         Transmission Line Equipment Exclusive of Excavation       491,049.17         Machine Excavation       58,047.2 Cy @ .375.	Transmission Line Equ	ipment Exclusive	of Excavation	1,370,105.96
1,454,034.68   F System   Transmission Line Equipment Exclusive of Excavation   986,588.81   Machine Excavation   126,544.2 Cy @ .375   47,454.08   Hand Excavation   251.7 Cy @ 1.31   329.73   Rock Excavation   2,971.4 Cy @ 3.50   10,399.90   1,044,772.52   [fol. 3644]	Machine Excavation	182,428.4 Cv (	<b>a</b> .375	
1,454,034.68   F System   Transmission Line Equipment Exclusive of Excavation   986,588.81   Machine Excavation   126,544.2 Cy @ .375   47,454.08   Hand Excavation   251.7 Cy @ 1.31   329.73   Rock Excavation   2,971.4 Cy @ 3.50   10,399.90   1,044,772.52   [fol. 3644]	Hand Excavation	2,330.4 Cy (	<b>3</b> 1.31	
Transmission Line Equipment Exclusive of Excavation 986,588.81 Machine Excavation 126,544.2 Cy @ .375. 47,454.08 Hand Excavation 251.7 Cy @ 1.31. 329.73 Rock Excavation 2,971.4 Cy @ 3.50. 10,399.90  1,044,772.52  [fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63 Machine Excavation 14,815.9 Cy @ .375. 5,555.96 Hand Excavation 6.2 Cy @ 1.34. 8.12 Rock Excavation 454.4 Cy @ 3.50. 1,590.40  64,691.11  H System  Transmission Line Equipment Exclusive of Excavation 2,359.52 Hand Excavation 540.0 Cy @ 1.31. 707.40  3,066.92  J System  Transmission Line Equipment Exclusive of Excavation 491,049.17 Machine Excavation 58,047.2 Cy @ .375. 21,767.70 Hand Excavation 311.9 Cy @ 1.31. 408.59 Rock Excavation 1,122.0 Cy @ 3.50. 3,927.00	Rock Excavation	3,561.5 Cy (	3.50	12,465.25
Transmission Line Equipment Exclusive of Excavation 986,588.81  Machine Excavation 126,544.2 Cy @ .375. 47,454.08  Hand Excavation 251.7 Cy @ 1.31. 329.73  Rock Excavation 2,971.4 Cy @ 3.50. 10,399.90  1,044,772.52  [fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63  Machine Excavation 14,815.9 Cy @ .375. 5,555.96  Hand Excavation 6.2 Cy @ 1.34. 8.12  Rock Excavation 454.4 Cy @ 3.50. 1,590.40  64,691.11  H System  Transmission Line Equipment Exclusive of Excavation 2,359.52  Hand Excavation 540.0 Cy @ 1.31. 707.40  3,066.92  J System  Transmission Line Equipment Exclusive of Excavation 491,049.17  Machine Excavation 58,047.2 Cy @ .375. 21,767.70  Hand Excavation 311.9 Cy @ 1.31 408.59  Rock Excavation 1,122.0 Cy @ 3.50. 3,927.00				1,454,034.68
Transmission Line Equipment Exclusive of Excavation 986,588.81  Machine Excavation 126,544.2 Cy @ .375. 47,454.08  Hand Excavation 251.7 Cy @ 1.31. 329.73  Rock Excavation 2,971.4 Cy @ 3.50. 10,399.90  1,044,772.52  [fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63  Machine Excavation 14,815.9 Cy @ .375. 5,555.96  Hand Excavation 6.2 Cy @ 1.34. 8.12  Rock Excavation 454.4 Cy @ 3.50. 1,590.40  64,691.11  H System  Transmission Line Equipment Exclusive of Excavation 2,359.52  Hand Excavation 540.0 Cy @ 1.31. 707.40  3,066.92  J System  Transmission Line Equipment Exclusive of Excavation 491,049.17  Machine Excavation 58,047.2 Cy @ .375. 21,767.70  Hand Excavation 311.9 Cy @ 1.31 408.59  Rock Excavation 1,122.0 Cy @ 3.50. 3,927.00	F System -	- *		
Machine Excavation       126,544.2 Cy @ .375       47,454.08         Hand Exeavation       251.7 Cy @ 1.31       329.73         Rock Excavation       2,971.4 Cy @ 3.50       10,399.90         1,044,772.52         [fol. 3644]         G System         Transmission Line Equipment Exclusive of Excavation       57,536.63         Machine Excavation       6.2 Cy @ 1.34       8.12         Rock Excavation       454.4 Cy @ 3.50       1,590.40         64,691.11         H System         Transmission Line Equipment Exclusive of Excavation       2,359.52         Hand Excavation       540.0 Cy @ 1.31       707.40         J System         Transmission Line Equipment Exclusive of Excavation       491,049.17         Machine Excavation       58,047.2 Cy @ .375       21,767.70         Hand Excavation       311.9 Cy @ 1.31       408.59         Rock Excavation       1,122.0 Cy @ 3.50       3,927.00		inment Evelusive	of Execution	986 588 81
[fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63 Machine Excavation 14,815.9 Cy @ .375. 5,555.96 Hand Excavation 6.2 Cy @ 1.34. 8.12 Rock Excavation 454.4 Cy @ 3.50. 1,590.40  64,691.11  H System  Transmission Line Equipment Exclusive of Excavation 2,359.52 Hand Excavation 540.0 Cy @ 1.31. 707.40  3,066.92  J System  Transmission Line Equipment Exclusive of Excavation 491,049.17 Machine Excavation 58,047.2 Cy @ .375. 21,767.70 Hand Excavation 311.9 Cy @ 1.31. 408.59 Rock Excavation 1,122.0 Cy @ 3.50. 3,927.00	Machine Excavation	126.544.2 Cv @	375	
[fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63 Machine Excavation 14,815.9 Cy @ .375. 5,555.96 Hand Excavation 6.2 Cy @ 1.34. 8.12 Rock Excavation 454.4 Cy @ 3.50. 1,590.40  64,691.11  H System  Transmission Line Equipment Exclusive of Excavation 2,359.52 Hand Excavation 540.0 Cy @ 1.31. 707.40  3,066.92  J System  Transmission Line Equipment Exclusive of Excavation 491,049.17 Machine Excavation 58,047.2 Cy @ .375. 21,767.70 Hand Excavation 311.9 Cy @ 1.31. 408.59 Rock Excavation 1,122.0 Cy @ 3.50. 3,927.00	Hand Excavation	251.7 Cy @	1.31	329.73
[fol. 3644]  G System  Transmission Line Equipment Exclusive of Excavation 57,536.63 Machine Excavation 14,815.9 Cy @ .375 5,555.96 Hand Excavation 6.2 Cy @ 1.34 8.12 Rock Excavation 454.4 Cy @ 3.50 1,590.40  64,691.11  H System  Transmission Line Equipment Exclusive of Excavation 2,359.52 Hand Excavation 540.0 Cy @ 1.31 707.40  3,066.92  J System  Transmission Line Equipment Exclusive of Excavation 491,049.17 Machine Excavation 58,047.2 Cy @ .375 21,767.70 Hand Excavation 311.9 Cy @ 1.31 408.59 Rock Excavation 1,122.0 Cy @ 3.50 3,927.00	Rock Excavation	2,971.4 Cy @	3.50	
G System  Transmission Line Equipment Exclusive of Excavation 57,536.63 Machine Excavation 14,815.9 Cy @ .375 5,555.96 Hand Excavation 6.2 Cy @ 1.34 8.12 Rock Excavation 454.4 Cy @ 3.50 1,590.40  64,691.11  H System  Transmission Line Equipment Exclusive of Excavation 2,359.52 Hand Excavation 540.0 Cy @ 1.31 707.40  3,066.92  J System  Transmission Line Equipment Exclusive of Excavation 491,049.17 Machine Excavation 58,047.2 Cy @ .375 21,767.70 Hand Excavation 311.9 Cy @ 1.31 408.59 Rock Excavation 1,122.0 Cy @ 3.50 3,927.00				1,044,772.52
Transmission Line Equipment Exclusive of Excavation       57,536.63         Machine Excavation       14,815.9 Cy @ .375       5,555.96         Hand Excavation       6.2 Cy @ 1.34       8.12         Rock Excavation       454.4 Cy @ 3.50       1,590.40         64,691.11         H System         Transmission Line Equipment Exclusive of Excavation       2,359.52         Hand Excavation       540.0 Cy @ 1.31       707.40         J System         Transmission Line Equipment Exclusive of Excavation       491,049.17         Machine Excavation       58,047.2 Cy @ .375       21,767.70         Hand Excavation       311.9 Cy @ 1.31       408.59         Rock Excavation       1,122.0 Cy @ 3.50       3,927.00	[fol. 3644]			
Transmission Line Equipment Exclusive of Excavation       57,536.63         Machine Excavation       14,815.9 Cy @ .375       5,555.96         Hand Excavation       6.2 Cy @ 1.34       8.12         Rock Excavation       454.4 Cy @ 3.50       1,590.40         64,691.11         H System         Transmission Line Equipment Exclusive of Excavation       2,359.52         Hand Excavation       540.0 Cy @ 1.31       707.40         J System         Transmission Line Equipment Exclusive of Excavation       491,049.17         Machine Excavation       58,047.2 Cy @ .375       21,767.70         Hand Excavation       311.9 Cy @ 1.31       408.59         Rock Excavation       1,122.0 Cy @ 3.50       3,927.00	G System			
Machine Excavation       14,815.9 Cy @ .375       5,555.96         Hand Excavation       6.2 Cy @ 1.34       8.12         Rock Excavation       454.4 Cy @ 3.50       1,590.40         64,691.11         H System         Transmission Line Equipment Exclusive of Excavation       2,359.52         Hand Excavation       540.0 Cy @ 1.31       707.40         3,066.92         J System         Transmission Line Equipment Exclusive of Excavation       491,049.17         Machine Excavation       58,047.2 Cy @ .375       21,767.70         Hand Excavation       311.9 Cy @ 1.31       408.59         Rock Excavation       1,122.0 Cy @ 3.50       3,927.00		inment Exclusive	of Excavation	57 536 63
Hand Excavation       6.2 Cy @ 1.34       8.12         Rock Excavation       454.4 Cy @ 3.50       1,590.40         64,691.11         H System       2,359.52         Hand Excavation       540.0 Cy @ 1.31       707.40         3,066.92         J System         Transmission Line Equipment Exclusive of Excavation       491,049.17         Machine Excavation       58,047.2 Cy @ .375       21,767.70         Hand Excavation       311.9 Cy @ 1.31       408.59         Rock Excavation       1,122.0 Cy @ 3.50       3,927.00				
Rock Excavation	Hand Excavation	6.2 Cy (	3 1.31	
H System  Transmission Line Equipment Exclusive of Excavation. 2,359.52 Hand Excavation 540.0 Cy @ 1.31 707.40  3,086.92  J System  Transmission Line Equipment Exclusive of Excavation 491,049.17 Machine Excavation 58,047.2 Cy @ .375 21,767.70 Hand Excavation 311.9 Cy @ 1.31 408.59 Rock Excavation 1,122.0 Cy @ 3.50 3,927.00	Rock Excavation	454.4 Cy @	3.50	1,590.40
Transmission Line Equipment Exclusive of Excavation       2,359.52         Hand Excavation       540.0 Cy @ 1.31       707.40         3,066.92         J System       Transmission Line Equipment Exclusive of Excavation       491,049.17         Machine Excavation       58,047.2 Cy @ .375       21,767.70         Hand Excavation       311.9 Cy @ 1.31       408.59         Rock Excavation       1,122.0 Cy @ 3.50       3,927.00		•		64,691.11
Hand Excavation       540.0 Cy @ 1.31       707.40         3,066.92         J System         Transmission Line Equipment Exclusive of Excavation       491,049.17         Machine Excavation       58,047.2 Cy @ .375       21,767.70         Hand Excavation       311.9 Cy @ 1.31       408.59         Rock Excavation       1,122.0 Cy @ 3.50       3,927.00	H System			
Hand Excavation       540.0 Cy @ 1.31       707.40         3,066.92         J System         Transmission Line Equipment Exclusive of Excavation       491,049.17         Machine Excavation       58,047.2 Cy @ .375       21,767.70         Hand Excavation       311.9 Cy @ 1.31       408.59         Rock Excavation       1,122.0 Cy @ 3.50       3,927.00	Transmission Line Equi	pment Exclusive	of Excavation	2,359.52
J System       Transmission Line Equipment Exclusive of Excavation       491,049.17         Machine Excavation       58,047.2 Cy @ .375       21,767.70         Hand Excavation       311.9 Cy @ 1.31       408.59         Rock Excavation       1,122.0 Cy @ 3.50       3,927.00	Hand Excavation	540.0 Cy @	<b>3</b> 1.31	707.40
Transmission Line Equipment Exclusive of Excavation       491,049.17         Machine Excavation       58,047.2 Cy @ .375       21,767.70         Hand Excavation       311.9 Cy @ 1.31       408.59         Rock Excavation       1,122.0 Cy @ 3.50       3,927.00				3,066.92
Transmission Line Equipment Exclusive of Excavation       491,049.17         Machine Excavation       58,047.2 Cy @ .375       21,767.70         Hand Excavation       311.9 Cy @ 1.31       408.59         Rock Excavation       1,122.0 Cy @ 3.50       3,927.00	J System			- 1
Machine Excavation       58,047.2 Cy @ .375		pment Exclusive	of Excavation	491,049,17
Hand Excavation 311.9 Cy @ 1.31				21,767.70
Rock Excavation 1,122.0 Cy @ 3.50		311.9 Cy @	1.31	408.59
517,152.46	Rock Excavation	1,122.0 Cy @	3.50	
				517,152.46

**	;	
Transi	mission Line Equipment—Contd.\	
K System		
	ipment Exclusive of Excavation	\$4,437,041.20
	362,097.3 Cy @ .375	135,786.49
Hand Excavation	21 990 4 Cv @ 1.31	28,807.42
Machine Excavation Hand Excavation Rock Excavation	21,990.4 Cy @ 1.31	385,199.50
	0	4,986,834.61
L System		
	ipment Exclusive of Excavation	2,707,893.79
Machine Excavation	351,788.2 Cy @ .375	131,920.58.
Hand Excavation	2,496.5 Cy @ 1.31	3,270.42
Rock Excavation	16,583.8 Cy @ 3.50	
		0.001:100.00
*		2,901,128.09
[fol. 3645]	*	*
M System	* .	
Transmission Line Equ	ipment Exclusive of Excavation	1,328,653.56
Machine Excavation	169,469.1 Cy @ .375	63,550.91
Hand Emparation	002 0 12: 100 1 21	371.91
Rock Excavation	2,974.1 Cy @ 3.50	10,409.35
*		1,402,985.73
O System		
Transmission Line Equ	ipment Exclusive of Excavation	4,277,134.59
Machine Excavation	444,990.1 Cy @ .375	166,871.29
77 177	0 000 0 0 - 6 1 91	. 11 770 71
Rock Excavation	102,669.0 Cy @ 3.50	359,341.50
		4,815,120.09
R System '		
	ipment Exclusive of Excavation	566,771.91
Machine Excavation	49,789.6 Cy @ .375	18,671.10
Hand Excavation	1,567.1 Cy @ 1.31	2,052.90
Rock Excavation	1,567.1 Cy @ 1.31 9,184.7 Cy @ 3.50	32,146.45
		619,642.36
Numbered System		
- /-	in-ant Pushesian of Presystian	1,223,885.94
Transmission Line Equ	78,369.1 Cy @ .375	29,388.41
Machine Excavation Hand Excavation	1,952.7 Cy @ 1.31	2,558.04
Rock Excavation	16,851.6 Cy @ 3.50	
		1,314,812.99
M D II Guntam		1,011,012.00
T.P.U. System	inment Freducino of Frequetion	617,022.83
	ipment Exclusive of Excavation 20,899.3 Cy @ .375	7,837.24
Machine Excavation Hand Excavation	14,779.5 Cy @ 1.31	19,361.14
Rock Excavation	8,537.7 Cy @ 3.50	29,881.95
4		674,103.16
Total Transmission	Line Equipment	27.052.546.81
TOTAL TIMESTREE	a sum sudmissions	

#### [fol. 3646] Compressing System Property

#### Compressing Station:

Alvord		\$14,504.68
Brad		162,192.74
Brazos		89,622.32
Breckenridge		290,099.28
Caddo	* * * * * * * * * *	. '
Channey	*******	261,986.25
Cheaney		137,093.05
Desdemona		77,229.85
Eastland	* * * * * * * * * *	130,994.31
Gainesville		76,295.28
Ibex		249,130.72
Joshua No. 1		441,055.93
Lochua No 2		
Joshua No. 2		69,602.39
Petrolia	1	,056,638.41
Pueblo		87,367.65
Ranger No. 1.		128,855.56
Ranger No. 2		113,004.96
Ranger No. 3	* * * * * * * * * *	
Donger No. 4		291,650.92
Ranger No. 4		165,904.20
Sipe Springs		182,576.20
Tiffin		51,066.71
X-Ray		69,240.16
		,

Total ...... 4,146,111.57

[fol. 3647]

General Office Land

General Office Land—\$44,545.00. Allocated to Texas Properties 86%—\$38,308.70.

[fol. 3648]

Other General Land

Other General Land—\$49,273.87. Allocated to Texas Properties 86%—\$42,375.53.

[fol. 3649]

General Office Structure

General Office Structure—\$321,437.63. Allocated to Texas Properties 86%—\$276,436.36.

135-3104

[fol. 3650] Other General Structures

Other General Structures—\$46,789.56.
Allocated to Texas Properties 86%—\$40,239.02.

[fol. 3651] General Office Furniture and Fixtures
General Office Furniture and Fixtures—\$207,601.84.
Allocated to Texas Properties 86%—\$178,537.58.

[fol. 3652] Other General Furniture and Fixtures
Other General Furniture and Fixtures—\$12,059.97.
Allocated to Texas Properties 86%—\$10,371.57.

[fol. 3653] General Shop Equipment

General Shop Equipment—\$104,000.27.

Allocated to Texas Properties 86%—\$89,440.23.

[fol. 3654] General Tools

General Tools—\$131,549.72. Allocated to Texas Properties 86%—\$113,132.76.

[fol. 3655] Automotive and Construction Equipment

Automotive and Construction Equipment—Net \$84,547.82 (Ex. 10).

Allocated to Texas Properties 86%-\$72,711.13.

[fol. 3656] General Telephone System

Line:

Petrolia to Shamrock		 \$64,545.43
Tap to Hollis Gasoline Plant.		 104.77
Tap to Shamrock		 421.65
Tap to Vernon Whse		 101.59
Petrolia to Fort Worth		 29,670.09
B-2 to Bowie		 1,287.34
B-5 to Decatur		802.13
Dallas to Fort Worth		 12,797.15
North Ft. Worth to Ft. Worth	Office	 470.18
Irving to Gainesville		 19,995.83
Gainesville Jet. to Gainesville.		 114.00
Petrolia Tap		 475.12

Tap to Petrolia Loading Rack	\$308.26
J. E. C. Jet. to Joshua	9,531.16
Tap to South Ft. Worth	366.47
Tap to A. C. Hogue	· 167.18
Tap to Handley	566.54
Gordon to Ibex and Plant No. 3	20,683.74
Tap to Tiffin Gasoline Plant	1,277.02
KB Jct. to Sipe Springs	11,925.11
Tap to Ranger Plant No. 1	114.24
[fol. 3657] Tap to Ranger Plant No. 2	\$302.45
KA Jct. to Mineral Wells Field	6,646.96
Tap to Cheaney Compressor Station	2,677.19
Ranger Plant No. 3 to Pueblo Gasoline Plant	5,989.26
Tap to Pueblo Loading Rack	625.95
Garden to X-Ray	2,534.85
Plant 108 to Plant No. 3	115.79
Line to Plant lot and offices	1,221.98
Line to Plant 103	93.70
Plant No. 3 to Ranger	316.42
Ranger Plant No. 3 to Eastland Compressor	4
Station	1,039.66
Plant 109 to Plant 109-A	1,222.07
Gordon Gasoline Plant to Gordon	150.20
Dallas to Joshua and Gordon to K. & O. Jet.	27,901.09
Tap to Second Ave. Dallas	1,369.05
Joshua to Gordon	26,538.36
Tap to Brad Compressor Station	2,206.14
Tap to Warren Lease	611.45
Tap to Caddo Compressor Station	764.76
Tap to Breckenridge Compressor Station	300.80
[fol. 3658] Joshua to L. & M. Jct.	\$2,305.12
Tap to Strawn	
Total	\$261,919.77

[fol. 3659]

Administration and Legal	Expensed During Construction, Engineering a	ind
Supervision During	Construction, Taxes During Construction	

	Gathering System Rights of Way Field Measuring Station Structures					2	9,179.61 $7,319.78$	3
	Field Measuring Station Equipment						3,943.02	
	Field Line Equipment					789	9,328.10	
	Transmission System Measuring Station						2,596.45	
	Transmission System Measuring Station						8,678.26	
	Other Transmission System Land					2.	1,102,59	
	Other Transmission System Leaseholds					900	863.74	
	Transmission System Rights of Way Transmission System Measuring Station	Structs	****				9,090.73 1,951.63	
	Other Transmission System Structures						0,355.40	
	Transmission System Measuring Station	Equipr	nent		*****		2,610.06	
	Transmission Line Equipment						2,546.81	
	Compressing Station					4 146	3,111.57	,
	Other General Structures						0,239.02	
	General Shop Equipment						,440.23	
	General Telephone System						,919.77	
						-		
	Total "A"		,			34,117	7,276.77	
	General Office Structure						3,436.36	
				-			-	
9	Total "B"					34,393	3,713.13	,
	Engineering and Supervision During C	onstru	ction	-59	% of			
	\$34,117,276.77 (Total "A")					1,705	5,863.84	,
	Administration and Legal Expenses Dur	ing Co	nstr	uctio	n-2%			
	of \$34,393,713.13 (Total "B")					687	,874.26	
	Taxes During Construction						3,500.00	
	Taxes During Constitution						,,000.00	
	[fol. 3660]			2				
	Interest During	Constr	ructio	on	4.			
	Gathering System Rights of Way	.0	,179	.61				
	Transmission Measuring Station Land.		,596					
	Transmission Measuring Station Lease-	P1	,					
	holds	8	,678	.26				
	Other Transmission System Land	21	,102	.59				
	Other Transmission System Leaseholds		863	.74			,	
	Transmission System Rights of Way		,090				*	
	Other General Land	42	,375	.53				
					2001	0.0		
		1,063	,886	.916	96%	63	,833.21	
	T. 11.16 . G G	07	010	MO		*		
	Field Measuring Station Structures		,319					
	Field Measuring Station Equipment	790	,943 $,328$	.02				
	Field Line Equipment	. 108	,040	. 10				
	*	010	500	000	21/2%	99	,764.77	
	TO	010	,000	. 50 6	927270	20 20	,101.11	
	Transmission System Measuring Station	191	051	69				
	Structures		,951		*			
	Other Transmission System Structures	90	,355	. 40				
	Transmission System Measuring Station Equipment	372	,610	06				
	Transmission Line Equipment	27,052	546	81	-			
	Compressing Stations	4,146	111	57				
	Other General Structures		239					
	General Shop Equipment		,440			,		
	General Telephone System		,919					
	1	32,185	,174	49@	04%	1,287	,406.98	

General Office Land	38,308.70@9%	3,447.78
General Office Structures	276,436.36@51/2%	15,204.00
Administration and Legal Expenses during Construction	687,874.26 1,705,863.84 8,500.00	
Preliminary and Organization Expenses.	194,005.00	
	2,596,243.10@5%	129,812.15
Total		1,522,468.89
[fol. 3661] Preliminary and C	Organization Exp	enses
Preliminary Geological Invest	igations	\$114,444.00
Preliminary Engineering Inve	0	49,695.00
		15,000.00
Charter and Qualification Fees		10,000.00
Franchise Tax		17,144.00
Franchise Tax Corporation License Tax		3,273.00
Federal Capital Stock Tax.		15,895.00
Engraving Common Stock Cer		136.00
	* *	225,587.00
Allocated to Texas-86%		194,005.00
[fols. 3662-3663] Working	Capital	
Materials and Supplies		\$416,000.00
Cash Working Capital:		
Bank Balances—\$300,000	@ 86%	258,000.00
45 Days' Expenses		200,000.00
Advances on Gas Purchase Con		360,000.00
Pre-paid Insurance and Renta		,
86%		27,500.00
Gas in System-150,000 M @ \$	.06	9,000.00
Petrolia Field Line Equipment		18,500.00
Total	\$	1.289,000.00
		,,

PLAINTIFFS' EXHIBIT No. 7 [fol. 3664] [fol. 3665] Lone Star Gas Company Texas Gathering, Transmission, Compressing and General Property Annual Depreciation, June 15, 1934 Hawley, Freese and Nichols J. A. Phillips Co. Table of Contents [fol. 3666] Side folio Annual Depreciation ..... 3667 Annual Depreciation Rates: 3668 Gathering System Rights of Way Field Measuring Station Structures 3668 Field Measuring Station Equipment..... 3668 Field Line Equipment 3668 Transmission System Measuring Station Lease-3669 Other Transmission System Leaseholds 3669 Transmission System Rights of Way..... 3669 Transmission System Measuring Station Struc-3669 Other Transmission System Structures..... 3669 Transmission System Measuring Station Equip-3669 Transmission Line Equipment..... 3670 Compressing Stations ..... 3673 General Office Structure 3674 Other General Structures 3674 General Office Furniture and Fixtures 3674 Other General Office Furniture and Fixtures.... 3674 General Shop Equipment 3674 General Telephone System 3674 3674 Non-Physical Property Calculation of Total Annual Rates 3675 3677 Mortality and Distribution Curves—Steel Pipe.... Historic Replacements and Abandonments..... 3678 [fol. 3667] Annual Depreciation Allowance Reproduction Annual Annual Gathering System Property: Cost-New . Rate Amount Rights of Way .... 5.296 \$486.15 \$9,179.61 Field Measuring Station Structures.... 27,319.78 93,943.02 1,446.86 3,482.47 5.296 Field Measuring Station Equipment. . . . 3.707 40,137.33 789,328.10 Field Line Equipment...... 5.085

Annual Depreciation	Allowance-Cor		
and a optophyton		nrinnea	
	Reproduction	Annual	Annual
Transmission System:	Cost-New	Rate	Amount
		zenic.	armount
Transmission Measuring Station Lease	9 679 96	2 .	401 21
other Transmission System Leaseholds	. 8,678.26 . 863.74		401.31
Rights of Way	. 899,090.73		71.68
Transmission System Measuring Station	n 000,000.76	. 344	3,092.87
Structures		3 1.823	9 405 40
Other Transmission System Structures.			2,405.48
Transmission System Measuring Station	. 50,000.40	1.823	1,647.18
		1 070	7 270 02
Transmission Line Equipment	372,610.00	1.978	7,370.23
	. 21,002,040.01	1. 2.185	590,557.10
Compressing System Property:			
Compressing Stations	4,145,111.57	3.376	139,972.73
General System Property:			
General Office Structures	. 276,436.36	1.396	3,859.05
Other General Structures	40,239.02	1.823	733.56
General Office Furniture and Fixtures.	178,537.58	8.219	14,674.00
Other General Furniture and Fixtures.	. 10,371.57		852.44
General Shop Equipment	. 89,440.23		3,842.35
General Telephone System			2,744.92
Non-Physical Properties:		9.020	2,111.02
Administrative and Legal Expense		, .	
During Construction	. 687,874.26	244	9 966 90
During Construction Engineering and Supervision During		344	2,366.29
Gonstruction	1,705,863.84	. 344	E 000 17
Taxes During Construction	. 1,100,000.09		5,868.17
			29.24
Interest During Construction			5,237.29
Preliminary and Organization Expense	. 194,003.00	. 344	667.38
Total Annual Depreciation Allow	ranca		2021 D48 00
			4001, 340.00
[fol. 3668] Annual	Depreciation		
Gathering System Rights of Way Amortization of 100% in 13 years Field Measuring Station Structures	4		
Amortization of 100% in 13 years			5.296%
Field Measuring Station Structures			0.200 /0
Amortization of 100% in 13 years			
Amortization of 100% in 13 years			2 0000
T: 11 36 . O: TO			5.296%
Field Measuring Station Equipment			5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years			5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years			5.296%
Field Measuring Station Equipment	,		5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years	_Annual A	mortization	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years	Annual A	mortization Fund—%	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years Field Line Equipment  Year Replacements 1 02	Annual A Rate—%	mortization Fund—% 5.065	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05	Annual A Rate—% 085 5.085	mortization Fund—% 5.065 -10.404	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09	Annual A Rate—% 5 085 5 085 5 085	mortization Fund—% 5.065 10.404 16.023	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15	Annual A Rate—% 085 5.085 5.085 5.085	mortization Fund—% 5.065 10.404 16.023 21.919	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22	Annual A Rate—% 085 5.085 5.085 5.085 5.085	mortization Fund—% 5.065 10.404 16.023 21.919 28.099	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31	Annual A Rate — %	mortization Fund—% 5.065 10.404 16.023 21.919 28.099 34.560	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22	Annual A Rate — %	mortization Fund—% 5.065 10.404 16.023 21.919 28.099 34.560	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31	Annual A Rate — %	mortization Fund—% 5.065 10.404 16.023 21.919 28.099	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31 7 40 8 51	Annual A Rate—% 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085	mortization Fund—% 5.065 10.404 16.023 21.919 28.099 34.560 41.319 48.373	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31 7 40	Annual A Rate — %	mortization Fund—% 5.065 10.404 16.023 21.919 28.099 34.560 41.319 48.373 55.730	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31 7 40 8 51 9 63 10 .75	Annual A Rate—% 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085	mortization Fund—% 5.065 -10.404 16.023 21.919 28.099 34.560 41.319 48.373 55.730 63.409	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31 7 40 8 51 9 63 10 75 11 88	Annual A Rate—% 085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085	mortization Fund—% 5.065 10.404 16.023 21.919 28.099 34.560 41.319 48.373 55.730 63.409 71.419	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31 7 40 8 51 9 63 10 .75 11 88 12 1.01	Annual A Rate—% 085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085	mortization Fund—% 5.065 10.404 16.023 21.919 28.099 34.560 41.319 48.373 55.730 63.409 71.419 79.779	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31 7 40 8 51 9 63 10 75 11 88 12 1.01 13 1.14	Annual A Rate—% 085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085	mortization Fund—% 5.065 10.404 16.023 21.919 28.099 34.560 41.319 48.373 55.730 63.409 71.419	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31 7 40 8 51 9 63 10 75 11 .88 12 1.01 13 1.14  [fol. 3669]	Annual A Rate—% 085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085	mortization Fund—% 5.065 10.404 16.023 21.919 28.099 34.560 41.319 48.373 55.730 63.409 71.419 79.779	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31 7 40 8 51 9 63 10 75 11 88 12 1.01 13 1.14  [fol. 3669]  Transmission System Measuring Station	Annual A Rate—% 085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085 5.085	mortization Fund—% 5.065 10.404 16.023 21.919 28.099 34.560 41.319 48.373 55.730 63.409 71.419 79.779 88.511	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31 7 40 8 51 9 63 10 75 11 88 12 1.01 13 1.14  [fol. 3669]  Transmission System Measuring Station Annual lease accruals	Annual A Rate—% 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085	mortization Fund—% 5.065 10.404 16.023 21.919 28.099 34.560 41.319 48.373 55.730 63.409 71.419 79.779 88.511	5.296%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31 7 40 8 51 9 63 10 75 11 88 12 1.01 13 1.14  [fol. 3669]  Transmission System Measuring Station Annual lease accruals Other Transmission System Leaseholds	Annual A Rate—% 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 6 085 6 085	mortization Fund—% 5.065 -10.404 16.023 21.919 28.099 34.560 41.319 48.373 55.730 63.409 71.419 79.779 88.511	3.707%
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31 7 40 8 51 9 63 10 75 11 88 12 1.01 13 1.14  [fol. 3669]  Transmission System Measuring Station Annual lease accruals Other Transmission System Leaseholds Annual lease accruals	Annual A Rate—% 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 6 085 6 085	mortization Fund—% 5.065 -10.404 16.023 21.919 28.099 34.560 41.319 48.373 55.730 63.409 71.419 79.779 88.511	3.707%
Field Measuring Station Equipment	Annual A Rate % 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 6 085 6 085 6 085 6 085 6 085 6 085	mortization Fund—% 5.065 -10.404 16.023 21.919 28.099 34.560 41.319 48.373 55.730 63.409 71.419 79.779 88.511	5.296% 3.707% . \$401.31 . 71.68
Field Measuring Station Equipment Amortization of 70% in 13 years  Field Line Equipment  Year Replacements  1 02 2 05 3 09 4 15 5 22 6 31 7 40 8 51 9 63 10 75 11 88 12 1.01 13 1.14  [fol. 3669]  Transmission System Measuring Station Annual lease accruals Other Transmission System Leaseholds Annual lease accruals	Annual A Rate % 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 5 085 6 085 6 085 6 085 6 085 6 085 6 085	mortization Fund—% 5.065 -10.404 16.023 21.919 28.099 34.560 41.319 48.373 55.730 63.409 71.419 79.779 88.511	5.296% 3.707% . \$401.31 . 71.68

Transmission System Measuring Station Structures Amortization of 100% in 25 years	1.823%
Other Transmission System Structures Amortization of 100% in 25 years	
Transmission System Measuring Station Equipment Current Replacements.	
Amortization of 100% in 40 years	
Total Annual Rate	1.978%

[fol. 3670] Transmission Line Equipment Main Lines—69.58% @ 2.139%

1.488%

Year         Replacements—and tion %         Major Rehabilition %         Major Rehabilition %         Total Annual Rate %         Amortizazation %           1         02         1.70         289         150         2.139         3.43           3         0.99         1.70         289         150         2.139         3.43           3         0.99         1.70         289         1.50         2.139         5.25           4         1.15         1.70         289         1.50         2.139         7.11           5         2.22         1.70         289         1.50         2.139         7.11           5         2.22         1.70         289         1.50         2.139         7.91           6         3.1         1.70         289         1.50         2.139         10.95           7         40         1.70         289         1.50         2.139         10.95           7         40         1.70         289         1.50         2.139         12.91           8         5.1         1.70         289         1.50         2.139         12.91           11         88         1.70         289         1.50			Annual Rate for Replace-	11			•
Year         Monorization %         Removals tations %         Rate %         Fund %           1         02         1.70         289         150         2.139         3.43           3         .09         1.70         289         150         2.139         3.43           3         .09         1.70         289         150         2.139         5.25           4         .15         1.70         289         150         2.139         9.02           6         .31         1.70         289         150         2.139         9.02           6         .31         1.70         289         150         2.139         10.95           7         .40         1.70         289         150         2.139         10.95           8         .51         1.70         289         150         2.139         14.88           9         .63         1.70         289         150         2.139         14.88           10         .75         1.70         289         150         2.139         18.80           11         .88         1.70         289         150         2.139         24.60           12		Poplace-		Major	Major	Total	Amortiza-
Year         %         tion %         %         tations %         Rate %         Fund %           1         02         1.70         289         150         2.139         1.68           2         0.05         1.70         289         150         2.139         3.43           3         0.99         1.70         289         1.50         2.139         5.25           4         1.15         1.70         289         1.50         2.139         7.11           5         22         1.70         289         1.50         2.139         10.95           7         40         1.70         289         1.50         2.139         10.95           7         40         1.70         289         1.50         2.139         10.95           7         40         1.70         289         1.50         2.139         12.92           8         51         1.70         289         1.50         2.139         16.84           10         .75         1.70         289         1.50         2.139         18.84           10         .75         1.70         289         1.50         2.139         22.68					Robabilia		
1         .02         1.70         .289         .150         2.139         1.68           2         .05         2.70         .289         .150         2.139         3.43           3         .09         1.70         .289         .150         2.139         7.11           5         .22         1.70         .289         .150         2.139         9.02           6         .31         1.70         .289         .150         2.139         10.95           7         .40         1.70         .289         .150         2.139         12.91           8         .51         1.70         .289         .150         2.139         14.88           9         .63         1.70         .289         .150         2.139         14.88           10         .75         1.70         .289         .150         2.139         18.80           11         .88         1.70         .289         .150         2.139         18.80           11         .88         1.70         .289         .150         2.139         24.60           12         1.01         1.70         .289         .150         2.139         24.60	Voor						
2         0.5         1.70         289         1.50         2.139         3.43           3         0.9         1.70         289         1.50         2.139         7.11           5         22         1.70         289         1.50         2.139         7.11           5         22         1.70         289         1.50         2.139         10.95           7         40         1.70         289         1.50         2.139         10.95           7         40         1.70         289         1.50         2.139         12.91           8         5.1         1.70         289         1.50         2.139         14.88           9         63         1.70         289         1.50         2.139         16.84           10         75         1.70         289         1.50         2.139         16.84           10         75         1.70         289         1.50         2.139         20.75           12         1.01         1.70         289         1.50         2.139         22.68           13         1.14         1.70         289         1.50         2.139         22.68	-						
3         09         1.70         289         150         2.139         5.25           4         15         1.70         289         150         2.139         7.11           5         22         1.70         289         150         2.139         9.02           6         31         1.70         289         150         2.139         10.95           7         40         1.70         289         150         2.139         14.88           9         63         1.70         289         150         2.139         14.88           9         63         1.70         289         150         2.139         16.84           10         75         1.70         289         150         2.139         16.84           10         75         1.70         289         150         2.139         20.75           12         1.01         1.70         289         150         2.139         22.68           13         1.14         1.70         289         150         2.139         22.68           13         1.74         2.70         2.89         150         2.139         22.68 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
4       15       1.70       289       150       2.139       7.11         5       22       1.70       289       150       2.139       10.95         7       40       1.70       289       150       2.139       10.95         7       40       1.70       289       150       2.139       12.91         8       51       1.70       289       150       2.139       14.88         9       63       1.70       289       150       2.139       16.84         10       75       1.70       289       150       2.139       18.80         11       88       1.70       289       150       2.139       20.75         12       1.01       1.70       289       150       2.139       22.68         13       1.14       1.70       289       150       2.139       24.60         14       1.27       1.70       289       150       2.139       26.51         15       1.39       1.70       289       150       2.139       30.28         17       1.65       1.70       289       150       2.139       34.00         <							3.43
5         22         1.70         289         150         2.139         10.95           7         40         1.70         289         150         2.139         10.95           8         51         1.70         289         150         2.139         14.88           9         63         1.70         289         150         2.139         16.84           10         75         1.70         289         150         2.139         18.80           11         88         1.70         289         150         2.139         22.68           12         1.01         1.70         289         150         2.139         22.68           13         1.14         1.70         289         150         2.139         22.68           13         1.14         1.70         289         150         2.139         24.60           14         1.27         1.70         289         150         2.139         24.51           15         1.39         1.70         289         150         2.139         32.15           15         1.39         1.70         289         150         2.139         32.15							5.25
6							
7         40         1.70         289         150         2.139         14.88           9         63         1.70         289         150         2.139         16.84           10         .75         1.70         289         150         2.139         18.80           11         .88         1.70         289         150         2.139         20.75           12         1.01         1.70         289         150         2.139         22.68           13         1.14         1.70         289         150         2.139         22.65           14         1.27         1.70         289         150         2.139         26.51           15         1.39         1.70         289         150         2.139         26.51           15         1.39         1.70         289         150         2.139         32.15           18         1.78         1.70         289         150         2.139         32.15           18         1.78         1.70         289         150         2.139         32.15           18         1.78         1.70         289         150         2.139         34.00							
8         .51         1.70         .289         1.50         2.139         14.88           9         .63         1.70         .289         1.50         2.139         16.84           11         .88         1.70         .289         1.50         2.139         20.75           12         1.01         1.70         .289         1.50         2.139         22.68           13         1.14         1.70         .289         1.50         2.139         22.68           13         1.14         1.70         .289         1.50         2.139         22.68           13         1.14         1.70         .289         1.50         2.139         26.51           14         1.27         1.70         .289         1.50         2.139         26.51           15         1.39         1.70         .289         1.50         2.139         30.28           17         1.65         1.70         .289         1.50         2.139         32.15           18         1.78         1.70         .289         1.50         2.139         34.00           19         1.91         1.70         .289         1.50         2.139							
9         63         1.70         .289         1.50         2.139         16.84           10         .75         1.70         .289         1.50         2.139         20.75           12         1.01         1.70         .289         1.50         2.139         22.68           13         1.14         1.70         .289         .150         2.139         24.60           14         1.27         1.70         .289         .150         2.139         26.51           15         1.39         1.70         .289         .150         2.139         26.51           15         1.39         1.70         .289         .150         2.139         26.51           16         1.53         1.70         .289         .150         2.139         30.28           17         1.65         1.70         .289         .150         2.139         32.15           18         1.78         1.70         .289         .150         2.139         34.00           19         1.91         1.70         .289         .150         2.139         34.00           19         1.91         1.70         .289         .150         2.139							
10       .75       1.70       .289       .150       2.139       18.80         11       .88       1.70       .289       .150       2.139       .20.75         12       1.01       1.70       .289       .150       2.139       .22.68         13       1.14       1.70       .289       .150       2.139       .24.60         14       1.27       1.70       .289       .150       2.139       .26.51         15       1.39       1.70       .289       .150       2.139       .28.41         16       1.53       1.70       .289       .150       2.139       .32.15         18       1.78       1.70       .289       .150       2.139       .32.15         18       1.78       1.70       .289       .150       2.139       .34.00         19       1.91       1.70       .289       .150       2.139       .34.00         19       1.91       1.70       .289       .150       2.139       .37.63         21       2.18       1.70       .289       .150       2.139       .34.00         19       1.91       1.70       .289       .150							
11         88         1.70         289         150         2.139         20.75           12         1.01         1.70         289         150         2.139         22.68           13         1.14         1.70         289         150         2.139         24.60           14         1.27         1.70         289         150         2.139         28.41           16         1.53         1.70         289         150         2.139         32.45           17         1.65         1.70         289         150         2.139         32.15           18         1.78         1.70         289         150         2.139         32.15           18         1.78         1.70         289         150         2.139         34.00           19         1.91         1.70         289         150         2.139         35.83           20         2.05         1.70         289         150         2.139         37.63           21         2.18         1.70         289         150         2.139         341.17           23         2.40         1.70         289         150         2.139         44.72							. 16.84
12       1.01       1.70       .289       .150       2.139       22.68         13       1.14       1.70       .289       .150       2.139       24.60         14       1.27       1.70       .289       .150       2.139       28.41         16       1.53       1.70       .289       .150       2.139       30.28         17       1.65       1.70       .289       .150       2.139       32.15         18       1.78       1.70       .289       .150       2.139       32.15         18       1.78       1.70       .289       .150       2.139       34.00         19       1.91       1.70       .289       .150       2.139       35.83         20       2.05       1.70       .289       .150       2.139       37.63         21       2.18       1.70       .289       .150       2.139       39.41         22       2.30       1.70       .289       .150       2.139       34.17         23       2.40       1.70       .289       .150       2.139       44.72         25       2.58       1.70       .289       .150       2.139 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
13         1.14         1.70         .289         .150         2.139         24.60           14         1.27         1.70         .289         .150         2.139         .26.51           15         1.39         1.70         .289         .150         2.139         .30.28           16         1.53         1.70         .289         .150         2.139         .30.28           17         1.65         1.70         .289         .150         2.139         .32.15           18         1.78         1.70         .289         .150         2.139         .34.00           19         1.91         1.70         .289         .150         2.139         .35.83           20         2.05         1.70         .289         .150         2.139         .37.63           21         2.18         1.70         .289         .150         2.139         .37.63           21         2.18         1.70         .289         .150         2.139         .41.17           23         2.40         1.70         .289         .150         2.139         .42.94           24         2.50         1.70         .289         .150         2.		. 88	1.70				
14         1.27         1.70         .289         .150         2.139         .28.41           16         1.53         1.70         .289         .150         2.139         .28.41           16         1.53         1.70         .289         .150         2.139         .30.28           17         1.65         1.70         .289         .150         2.139         .32.15           18         1.78         1.70         .289         .150         2.139         .34.00           19         1.91         1.70         .289         .150         2.139         .35.83           20         2.05         1.70         .289         .150         2.139         .37.63           21         2.18         1.70         .289         .150         2.139         .37.63           21         2.18         1.70         .289         .150         2.139         .41.17           23         2.40         1.70         .289         .150         2.139         .42.94           24         2.50         1.70         .289         .150         2.139         .44.72           25         2.58         1.70         .289         .150         2		1.01	1.70	. 289	.150		
15         1.39         1.70         .289         .150         2.139         28.41           16         1.53         1.70         .289         .150         2.139         30.28           17         1.65         1.70         .289         .150         2.139         32.15           18         1.78         1.70         .289         .150         2.139         34.00           19         1.91         1.70         .289         .150         2.139         35.83           20         2.05         1.70         .289         .150         2.139         37.63           21         2.18         1.70         .289         .150         2.139         39.41           22         2.30         1.70         .289         .150         2.139         39.41           22         2.30         1.70         .289         .150         2.139         34.17           23         2.40         1.70         .289         .150         2.139         44.72           25         2.58         1.70         .289         .150         2.139         44.72           25         2.58         1.70         .289         .150         2.139	13	1.14	1.70	. 289	. 150	2.139	24.60
16         1.53         1.70         .289         .150         2.139         30.28           17         1.65         1.70         .289         .150         2.139         32.15           18         1.78         1.70         .289         .150         2.139         34.00           19         1.91         1.70         .289         .150         2.139         35.83           20         2.05         1.70         .289         .150         2.139         37.63           21         2.18         1.70         .289         .150         2.139         39.41           22         2.30         1.70         .289         .150         2.139         39.41           22         2.30         1.70         .289         .150         2.139         34.17           23         2.40         1.70         .289         .150         2.139         44.72           24         2.50         1.70         .289         .150         2.139         44.72           25         2.58         1.70         .289         .150         2.139         46.52           26         2.65         1.70         .289         .150         2.139	14	1.27			. 150	2.139	26.51
17         1.65         1.70         .289         .150         2.139         32.15           18         1.78         1.70         .289         .150         2.139         34.00           19         1.91         1.70         .289         .150         2.139         35.83           20         2.05         1.70         .289         .150         2.139         37.63           21         2.18         1.70         .289         .150         2.139         39.41           22         2.30         1.70         .289         .150         2.139         41.17           23         2.40         1.70         .289         .150         2.139         42.94           24         2.50         1.70         .289         .150         2.139         42.94           24         2.50         1.70         .289         .150         2.139         46.52           26         2.65         1.70         .289         .150         2.139         46.52           26         2.65         1.70         .289         .150         2.139         48.36           27         2.70         1.70         .289         .150         2.139	15	1.39	1.70	. 289	. 150	2.139	28.41
17       1.65       1.70       .289       .150       2.139       .34.00         19       1.91       1.70       .289       .150       2.139       .34.00         19       1.91       1.70       .289       .150       2.139       .35.83         20       2.05       1.70       .289       .150       2.139       .39.41         21       2.18       1.70       .289       .150       2.139       .41.17         23       2.40       1.70       .289       .150       2.139       .42.94         24       2.50       1.70       .289       .150       2.139       .44.72         25       2.58       1.70       .289       .150       2.139       .44.72         26       2.65       1.70       .289       .150       2.139       .46.52         26       2.65       1.70       .289       .150       2.139       .48.36         27       2.70       1.70       .289       .150       2.139       .50.26         28       2.75       1.70       .289       .150       2.139       .52.23         29       2.78       1.70       .289       .150       <	16	1.53	1.70	. 289	.150	2.139	30.28
19       1.91       1.70       .289       .150       2.139       .35.83         20       2.05       1.70       .289       .150       2.139       .37.63         21       2.18       1.70       .289       .150       2.139       .39.41         22       2.30       1.70       .289       .150       2.139       .41.17         23       2.40       1.70       .289       .150       2.139       .42.94         24       2.50       1.70       .289       .150       2.139       .44.72         25       2.58       1.70       .289       .150       2.139       .46.52         26       2.65       1.70       .289       .150       2.139       .48.36         27       2.70       1.70       .289       .150       2.139       .50.26         28       2.75       1.70       .289       .150       2.139       .52.23         29       2.78       1.70       .289       .150       2.139       .54.29         30       2.82       1.70       .289       .150       2.139       .56.43         31       2.86       1.70       .289       .150       <	17	1.65	1.70	. 289	. 150	2.139	32.15
19       1.91       1.70       .289       .150       2.139       .35.83         20       2.05       1.70       .289       .150       2.139       .37.63         21       2.18       1.70       .289       .150       2.139       .39.41         22       2.30       1.70       .289       .150       2.139       .41.17         23       2.40       1.70       .289       .150       2.139       .42.94         24       2.50       1.70       .289       .150       2.139       .44.72         25       2.58       1.70       .289       .150       2.139       .46.52         26       2.65       1.70       .289       .150       2.139       .48.36         27       2.70       1.70       .289       .150       2.139       .50.26         28       2.75       1.70       .289       .150       2.139       .52.23         29       2.78       1.70       .289       .150       2.139       .54.29         30       2.82       1.70       .289       .150       2.139       .56.43         31       2.86       1.70       .289       .150       <	18	1.78		. 289	.150	2.139	34.00
20       2.05       1.70       289       150       2.139       37.63         21       2.18       1.70       289       150       2.139       39.41         22       2.30       1.70       289       150       2.139       41.17         23       2.40       1.70       289       150       2.139       42.94         24       2.50       1.70       289       150       2.139       44.72         25       2.58       1.70       289       150       2.139       46.52         26       2.65       1.70       289       150       2.139       48.36         27       2.70       1.70       289       150       2.139       50.26         28       2.75       1.70       289       150       2.139       50.26         28       2.78       1.70       289       150       2.139       54.29         30       2.82       1.70       289       150       2.139       56.43         31       2.86       1.70       289       150       2.139       56.43         32       2.91       1.70       289       150       2.139       65.89	19	1.91	1.70	.289	. 150	2:139	
21       2.18       1.70       289       150       2.139       39.41         22       2.30       1.70       289       150       2.139       41.17         23       2.40       1.70       289       150       2.139       42.94         24       2.50       1.70       289       150       2.139       44.72         25       2.58       1.70       289       150       2.139       46.52         26       2.65       1.70       289       150       2.139       48.36         27       2.70       1.70       289       150       2.139       50.26         28       2.75       1.70       289       150       2.139       52.23         29       2.78       1.70       289       150       2.139       54.29         30       2.82       1.70       289       150       2.139       56.43         31       2.86       1.70       289       150       2.139       58.66         32       2.91       1.70       289       150       2.139       68.96         34       3.00       1.70       289       150       2.139       65.89	20	2.05	1.70	. 289	. 150	2.139	37.63
22       2.30       1.70       .289       .150       2.139       41.17         23       2.40       1.70       .289       .150       2.139       42.94         24       2.50       1.70       .289       .150       2.139       44.72         25       2.58       1.70       .289       .150       2.139       46.52         26       2.65       1.70       .289       .150       2.139       50.26         28       2.75       1.70       .289       .150       2.139       52.23         29       2.78       1.70       .289       .150       2.139       52.23         29       2.78       1.70       .289       .150       2.139       54.29         30       2.82       1.70       .289       .150       2.139       56.43         31       2.86       1.70       .289       .150       2.139       58.66         32       2.91       1.70       .289       .150       2.139       68.96         34       3.00       1.70       .289       .150       2.139       68.58         35       3.05       1.70       .289       .150       2.139 <td>21</td> <td>2.18</td> <td>1.70</td> <td>. 289</td> <td>.150</td> <td>2.139</td> <td>39.41</td>	21	2.18	1.70	. 289	.150	2.139	39.41
23         2.40         1.70         .289         .150         2.139         42.94           24         2.50         1.70         .289         .150         2.139         44.72           25         2.58         1.70         .289         .150         2.139         46.52           26         2.65         1.70         .289         .150         2.139         48.36           27         2.70         1.70         .289         .150         2.139         50.26           28         2.75         1.70         .289         .150         2.139         52.23           29         2.78         1.70         .289         .150         2.139         54.29           30         2.82         1.70         .289         .150         2.139         56.43           31         2.86         1.70         .289         .150         2.139         58.66           32         2.91         1.70         .289         .150         2.139         60.97           33         2.95         1.70         .289         .150         2.139         68.38           34         3.05         1.70         .289         .150         2.139		2.30	1.70	289	. 150	2.139	
24       2.50.       1.70       .289       .150       2.139       .44.72         25       2.58       1.70       .289       .150       2.139       .46.52         26       2.65       1.70       .289       .150       2.139       .48.36         27       2.70       1.70       .289       .150       2.139       .50.26         28       2.75       1.70       .289       .150       2.139       .52.23         29       2.78       1.70       .289       .150       2.139       .54.29         30       2.82       1.70       .289       .150       2.139       .56.43         31       2.86       1.70       .289       .150       2.139       .58.66         32       2.91       1.70       .289       .150       2.139       .63.38         34       3.00       1.70       .289       .150       2.139       .63.38         34       3.05       1.70       .289       .150       2.139       .68.50         36       3.11       1.70       .289       .150       2.139       .68.50         36       3.11       1.70       .289       .150							
25         2.58         1.70         .289         .150         2.139         .46.52           26         2.65         1.70         .289         .150         2.139         .48.36           27         2.70         1.70         .289         .150         2.139         .50.26           28         2.75         1.70         .289         .150         2.139         .52.23           29         2.78         1.70         .289         .150         2.139         .54.29           30         2.82         1.70         .289         .150         2.139         .56.43           31         2.86         1.70         .289         .150         2.139         .58.66           32         2.91         1.70         .289         .150         2.139         .63.38           34         3.00         1.70         .289         .150         2.139         .63.38           34         3.05         1.70         .289         .150         2.139         .68.50           35         3.05         1.70         .289         .150         2.139         .68.50           36         3.11         1.70         .289         .150         2						2.139	
26       2.65       1.70       .289       .150       2.139       48.36         27       2.70       1.70       .289       .150       2.139       50.26         28       2.75       1.70       .289       .150       2.139       52.23         29       2.78       1.70       .289       .150       2.139       54.29         30       2.82       1.70       .289       .150       2.139       56.43         31       2.86       1.70       .289       .150       2.139       58.66         32       2.91       1.70       .289       .150       2.139       60.97         33       2.95       1.70       .289       .150       2.139       63.38         34       3.00       1.70       .289       .150       2.139       65.89         35       3.05       1.70       .289       .150       2.139       68.50         36       3.11       1.70       .289       .150       2.139       74.05         38       3.22       1.70       .289       .150       2.139       76.95         39       3.28       1.70       .289       .150       2.139 <td></td> <td></td> <td></td> <td></td> <td></td> <td>2.139</td> <td></td>						2.139	
27         2.70         1.70         .289         .150         2.139         50.26           28         2.75         1.70         .289         .150         2.139         52.23           29         2.78         1.70         .289         .150         2.139         54.29           30         2.82         1.70         .289         .150         2.139         .56.43           31         2.86         1.70         .289         .150         2.139         .58.66           32         2.91         1.70         .289         .150         2.139         63.38           34         3.00         1.70         .289         .150         2.139         .63.38           34         3.05         1.70         .289         .150         2.139         .68.50           36         3.11         1.70         .289         .150         2.139         .68.50           36         3.11         1.70         .289         .150         2.139         .74.05           38         3.22         1.70         .289         .150         2.139         .76.95           39         3.28         1.70         .289         .150         2.139		2.65				2.139	
28       2.75       1.70       .289       .150       2.139       52.23         29       2.78       1.70       .289       .150       2.139       54.29         30       2.82       1.70       .289       .150       2.139       56.43         31       2.86       1.70       .289       .150       2.139       58.66         32       2.91       1.70       .289       .150       2.139       60.97         33       2.95       1.70       .289       .150       2.139       63.38         34       3.00       1.70       .289       .150       2.139       68.50         35       3.05       1.70       .289       .150       2.139       68.50         36       3.11       1.70       .289       .150       2.139       74.05         38       3.22       1.70       .289       .150       2.139       76.95         39       3.28       1.70       .289       .150       2.139       76.95         39       3.28       1.70       .289       .150       2.139       79.99         40       3.34       1.70       .289       .150       2.139 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
29         2.78         1.70         .289         150         2.139         54.29           30         2.82         1.70         .289         150         2.139         56.43           31         2.86         1.70         .289         150         2.139         58.66           32         2.91         1.70         .289         .150         2.139         60.97           33         2.95         1.70         .289         .150         2.139         63.38           34         3.00         1.70         .289         .150         2.139         65.89           35         3.05         1.70         .289         .150         2.139         68.50           36         3.11         1.70         .289         .150         2.139         74.05           38         3.22         1.70         .289         .150         2.139         76.95           39         3.28         1.70         .289         .150         2.139         79.99           40         3.34         1.70         .289         .150         2.139         83.16           41         3.39         1.70         .289         .150         2.139							
30       2.82       1.70       .289       150       2.139       .56.43         31       2.86       1.70       .289       .150       2.139       .58.66         32       2.91       1.70       .289       .150       2.139       .60.97         33       2.95       1.70       .289       .150       2.139       .63.38         34       3.00       1.70       .289       .150       2.139       .65.89         35       3.05       1.70       .289       .150       2.139       .68.50         36       3.11       1.70       .289       .150       2.139       .74.05         38       3.22       1.70       .289       .150       2.139       .76.95         39       3.28       1.70       .289       .150       2.139       .79.99         40       3.34       1.70       .289       .150       2.139       .83.16         41       3.39       1.70       .289       .150       2.139       .89.93         43       3.46       1.70       .289       .150       2.139       .89.93         43       3.46       1.70       .289       .150 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
31         2.86         1.70         .289         150         2.139         58.66           32         2.91         1.70         .289         .150         2.139         60.97           33         2.95         1.70         .289         .150         2.139         63.38           34         3.00         1.70         .289         .150         2.139         65.89           35         3.05         1.70         .289         .150         2.139         68.50           36         3.11         1.70         .289         .150         2.139         74.05           38         3.22         1.70         .289         .150         2.139         76.95           39         3.28         1.70         .289         .150         2.139         76.95           39         3.28         1.70         .289         .150         2.139         79.99           40         3.34         1.70         .289         .150         2.139         83.16           41         3.39         1.70         .289         .150         2.139         89.93           42         3.43         1.70         .289         .150         2.139							
32       2.91       1.70       .289       .150       2.139       60.97         33       2.95       1.70       .289       .150       2.139       63.38         34       3.00       1.70       .289       .150       2.139       65.89         35       3.05       1.70       .289       .150       2.139       .68.50         36       3.11       1.70       .289       .150       2.139       .71.21         37       3.16       1.70       .289       .150       2.139       .76.95         38       3.22       1.70       .289       .150       2.139       .76.95         39       3.28       1.70       .289       .150       2.139       .79.99         40       3.34       1.70       .289       .150       2.139       .83.16         41       3.39       1.70       .289       .150       2.139       .89.93         42       3.43       1.70       .289       .150       2.139       .89.93         43       3.46       1.70       .289       .150       2.139       .99.57         44       3.47       1.70       .289       .150							
33         2.95         1.70         .289         .150         2.139         63.38           34         3.00         1.70         .289         .150         2.139         .65.89           35         3.05         1.70         .289         .150         2.139         .68.50           36         3.11         1.70         .289         .150         2.139         .71.21           37         3.16         1.70         .289         .150         2.139         .74.05           38         3.22         1.70         .289         .150         2.139         .76.95           39         3.28         1.70         .289         .150         2.139         .79.99           40         3.34         1.70         .289         .150         2.139         .83.16           41         3.39         1.70         .289         .150         2.139         .86.47           42         3.43         1.70         .289         .150         2.139         .89.93           43         3.46         1.70         .289         .150         2.139         .93.57           44         3.47         1.70         .289         .150         2.							
34     3.00     1.70     .289     .150     2.139     .65.89       35     3.05     1.70     .289     .150     2.139     .68.50       36     3.11     1.70     .289     .150     2.139     .71.21       37     3.16     1.70     .289     .150     2.139     .74.05       38     3.22     1.70     .289     .150     2.139     .76.95       39     3.28     1.70     .289     .150     2.139     .79.99       40     3.34     1.70     .289     .150     2.139     .83.16       41     3.39     1.70     .289     .150     2.139     .86.47       42     3.43     1.70     .289     .150     2.139     .89.93       43     3.46     1.70     .289     .150     2.139     .89.93       44     3.47     1.70     .289     .150     2.139     .93.57       44     3.47     1.70     .289     .150     2.139     .97.42							
35     3.05     1.70     .289     .150     2.139     .68.50       36     3.11     1.70     .289     .150     2.139     .71.21       37     3.16     1.70     .289     .150     2.139     .74.05       38     3.22     1.70     .289     .150     2.139     .76.95       39     3.28     1.70     .289     .150     2.139     .79.99       40     3.34     1.70     .289     .150     2.139     .83.16       41     3.39     1.70     .289     .150     2.139     .86.47       42     3.43     1.70     .289     .150     2.139     .89.93       43     3.46     1.70     .289     .150     2.139     .93.57       44     3.47     1.70     .289     .150     2.139     .97.42							
36     3.11     1.70     .289     .150     2.439     .71.21       37     3.16     1.70     .289     .150     2.139     .74.05       38     3.22     1.70     .289     .150     2.139     .76.95       39     3.28     1.70     .289     .150     2.139     .79.99       40     3.34     1.70     .289     .150     2.139     .83.16       41     3.39     1.70     .289     .150     2.139     .86.47       42     3.43     1.70     .289     .150     2.139     .89.93       43     3.46     1.70     .289     .150     2.139     .93.57       44     3.47     1.70     .289     .150     2.139     .97.42							
37     3.16     1.70     .289     .150     2.139     .74.05       38     3.22     1.70     .289     .150     2.139     .76.95       39     3.28     1.70     .289     .150     2.139     .79.99       40     3.34     1.70     .289     .150     2.139     .83.16       41     3.39     1.70     .289     .150     2.139     .86.47       42     3.43     1.70     .289     .150     2.139     .89.93       43     3.46     1.70     .289     .150     2.139     .93.57       44     3.47     1.70     .289     .150     2.139     .97.42							
38     3.22     1.70     .289     .150     2.139     .76.95       39     3.28     1.70     .289     .150     2.139     .79.99       40     3.34     1.70     .289     .150     2.139     .83.16       41     3.39     1.70     .289     .150     2.139     .86.47       42     3.43     1.70     .289     .150     2.139     .89.93       43     3.46     1.70     .289     .150     2.139     .93.57       44     3.47     1.70     .289     .150     2.139     .97.42							
39     3.28     1.70     .289     .150     2.139     .79.99       40     3.34     1.70     .289     .150     2.139     .83.16       41     3.39     1.70     .289     .150     2.139     .86.47       42     3.43     1.70     .289     .150     2.139     .89.93       43     3.46     1.70     .289     .150     2.139     .93.57       44     3.47     1.70     .289     .150     2.139     .97.42							
40     3.34     1.70     .289     .150     2.139     83.16       41     3.39     1.70     .289     .150     2.139     86.47       42     3.43     1.70     .289     .150     2.139     89.93       43     3.46     1.70     .289     .150     2.139     93.57       44     3.47     1.70     .289     .150     2.139     97.42							
41     3.39     1.70     .289     .150     2.139     86.47       42     3.43     1.70     .289     .150     2.139     89.93       43     3.46     1.70     .289     .150     2.139     93.57       44     3.47     1.70     .289     .150     2.139     97.42							
42     3.43     1.70     1.289     .150     2.139     89.93       43     3.46     1.70     .289     .150     2.139     93.57       44     3.47     1.70     .289     .150     2.139     97.42							96 47
43 3.46 1.70 .289 .150 2.139 93.57 44 3.47 1.70 .289 .150 2.139 97.42							
44 3.47 1.70 .289 .150 2.139 97.42							
45 6.40 1.70 .289 .150 2.139 101.51							
	45	3.40	1.70	. 289	. 150	2.139	101.51

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	Zation Fund %	44.44.44.44.44.44.44.44.44.44.44.44.44.	100.53
,376%	Total Annual Rate %		3.986. 2.986
٠	Major Removals		0888 0888 0888
	. *9		
18 c 1.989 £	innual Rate for Replace- ments to Amorthzotion	**************************************	1.70
nes - 15,916	Replace- ments &	\$218464256894488868485588855668848799944 \$218464645689488888888888888888888888888888	
Tap Lines	Year	. 4888888888888888888888888888888888888	

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PAGE

[fol. 3672]

Gathering Li	nes	11.51% @ 2.770%		319%
	Year	Replacements	Annual Rate %.	Amortization Fund %
	1 2 3 4 5 6	.02 .05 .09 .15	2.77 2.77 2.77 2.77 2.77	2.750 5.635 8.653 11.792 15.050
	7 8 9 10	.31 .40 .51 .63	2.77 2.77 2.77 2.77 2.77	18, 413 21, 888 25, 461 29, 129 32, 897
	11 12 13.	. 88 1.01 1.14 1.27	2.77 2.77 2.77 2.77	36.761 40.727 44.801 48.989
	15 16 17 18	1.39 1.53 1.65 1.78	2.77 2.77 2.77 2.77	53.308 -57.746 62.331 67.061
	19	1.91 2.05	$\frac{2.77}{2.77}$ .	71:945 76:982

Total Annual Rate for Transmission Line Equipment 2.1\$3%

[fol. 3673]

Compressing Stations

Field Stations....

Main Line Stations33	3.72% @ 2.57	1%	.867	%
Item	Per Cent of Total	Life in Years	Annual Rate %	Weighted Annual Rate %
Land and Improvements	1.61	50	. 344	.006
Leaseholds		50	. 344	.001
Joint Property		20	2.718	.006
Class A Structures	7.63	25	1.823	.139
Class B Structures		16	3:895	.273
Main Units	47.37	-35	.879	.416
Auxiliary Units	4.19	20	2.718	.114
Cooling System and Piping		20	2.718	. 582
Lighting Equipment		10	7.587	.056
Furniture and Fixtures		7	11.914	.018
Fire Protection		10	7.587	.006
Shop Equipment		. 7	11.914	206
Other Equipment		10	7.587	229
Boiler Plant		20	2.718	. 094
Water Supply	1.21	20	2.718	.033
Current Replacements				. 392
Total				2.571

....66.28% @ 3.786%

2.509%

(6)		Per Cent	Life in	Annual	Weighted Annual
	Item	of Total	Years	Rate %	Rate %
	Land and Improvements	2.11	50	.344	.007
	Leaseholds	. 83	. 50	.344	.003
	Class A Structures	6.50	25	1.823	118
	Class B Structures	7.99	16	3.895	.311
	Main Units	49.93	35	.879	. 439
	Auxiliary Units	4.06	20	2.718	.110
	Water Supply	1.49	25 20	1.823	.027
	Cooling System and Piping Lighting Equipment	.48	. 10	7.587	.036
	Furniture and Fixtures	.16	7	11.914	019
	Fire Protection	. 28	10	7.587	.021
	Other Equipment	4.33	10	7.587	.328
	Current Replacements				. 413
	Removals and Abandonments		**/	b	1.360 .
	'Total	-			3.786
	/ -				
	Total Annual Rate for Com	pressing Sta	tions		3.376%
	[fol. 3674]				*
	General Office Structure	4			
	Current Replacements Amortization of 100% in 40			750%	
	Amortization of 100% in 40	years		646%	
	Total Annual Rate		, , , , , , , , ,	. 1.396%	
	Other General Structures				
	Amortization of 100% in 25	years		. 1.825%	
	General Office Furniture and Fixtu Other General Furniture and Fixtu	res			
	* .				Weighted
		Per Cent	Life in	Annual	Annual
	Item .	of Total	Years	Rate %	Rate
	Furniture and Fixtures	50.66	20	2.718	1.377
	Machine Equipment	34.03 4.70 1.47	5	17.740	6.037
	Law Library	4 711			
	Desperies	1 47	20	2.718	.128
	Draperies		10	7.587	.116
	Draperies	1.47 3.38 5.80	10 7 20	7.587	
	Draperies. Rugs Dictographs.	3.38 5.80	10 7 20	7.587	.116
	Praperies Rugs Dictographs Total Annual Rate	3.38 5.80	10 7 20	7.587 11.914 2.718	.116 .403 .158
	Draperies Rugs Dictographs Total Annual Rate General Shop Equipment	3.38 5.80	10 7 20	7.587 11.914 2.718	.116 .403 .158
	Draperies. Rugs. Dictographs.  Total Annual Rate.  General Shop Equipment Amortization of 100% in 15	3.38 5.80	10 7 20	7.587 11.914 2.718	.116 .403 .158
	Draperies. Rugs. Dictographs.  Total Annual Rate.  General Shop Equipment Amortization of 100% in 15	3.38 5.80	10 7 20	7.587 11.914 2.718	.116 .403 .158
	Draperies. Rugs. Dictographs.  Total Annual Rate.  General Shop Equipment Amortization of 100% in 15	3.38 5.80	10 7 20	7.587 11.914 2.718	.116 .403 .158
	Draperies Rugs Dictographs  Total Annual Rate  General Shop Equipment Amortization of 100% in 15  General Telephone System Current Replacements Amortization of 100% in 40	3.38 5.80 years	10 7 20	7.587 11.914 2.718 4.296% 	.116 .403 .158
	Draperies. Rugs. Dictographs.  Total Annual Rate.  General Shop Equipment Amortization of 100% in 15	3.38 5.80 years	10 7 20	7.587 11.914 2.718 4.296% 	.116 .403 .158
	Draperies Rugs Dictographs  Total Annual Rate  General Shop Equipment Amortization of 100% in 15  General Telephone System Current Replacements Amortization of 100% in 40  Total Annual Rate	3.38 5.80 years	10 7 20	7.587 11.914 2.718 4.296% 4.296% 	.116 .403 .158
	Draperies Rugs Dictographs  Total Annual Rate  General Shop Equipment Amortization of 100% in 15  General Telephone System Current Replacements Amortization of 100% in 40  Total Annual Rate	3.38 5.80 years	10 7 20	7.587 11.914 2.718 4.296% 4.296% 	.116 .403 .158

(Here follow 2 pasters, side folios 3675 and 3676, and 2 photos, folios 3677 and 3678)

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PAGE

2162A

[fol. 3675]

Annual Renewal Factor % Age in Years Renewals of Original Units %	.02	.04	.07	.12	.18 5	.27 6 .31	,35 ,40	.46 8 .51	.57	.69 10	.81 .11 .87	.93 1.00	1.07	1.19	1.31 1.37	1.43 16 1.50
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	.000000	.000008	.000014	.000024 .000035 .000036 .000000 .150095	.000036 .000060 .000063 .000060 .000000	,000054 ,000090 ,000108 ,000105 ,000088 ,000000	.000070 .000135 .000162 .000180 .000154 .000124 .000000	.000092 .000175 .000243 .000270 .000264 .000217 .000160 .000000	.000114 .000230 .000315 .000405 .000396 .000373 .000281 .000205 .000000	.000118 .000285 .000414 %.000525 .000595 .000559 .000481 .000358 .000253 .000000	.000162 .000345 .000513 .000690 .000771 .000838 .000721 .000614 .000443 .000301 .000000	.000186 .000405 .000621 .000856 .001013 .001087 .001082 .000921 .000759 .000528 .000350 .000000	.000214 .000465 .000729 .001036 .001255 .001428 .001403 .001381 .001138 .000904 .000613 .000403 .000000	.000238 .000535 .000837 .001216 .001520 .001770 .001844 .001797 .001356 .001050 .000705 .000456 .000000	.000262 .000595 .000963 .001396 .001784 .002142 .002285 .002353 .002213 .002035 .001576 .001209 .000799 .000506	.000286 .000655 .001071 .001606 .002048 .002515 .002766 .002915 .002909 .002638 .002364 .001814 .001369 .000886 .000556
16 17 18 19 20 21 22					7									1.265024	1.390118	1.526398

Calculation of Total Annual Renewal Rates Based on Distribution Curve for

	1.43	1.56	1.68	1.80	1.92	2.04	$2.15 \\ 22$	2.24	2.31	2.39
	1.50	1.62	1.74	1.86	1.98 .	2.10	2.20	2.28	2.36	2.42
62	. 000286	000312	.000336	.000360	. 000384	.000408	.000430	.000448	.000462	.000478
95	.000655	.000715	.000780	.000840	.000900	.000960	.001020	.001075	.001120	.001155
63	.001071	.001179	.001288	.001405	.001513	.001621	.001729	.001837	.001936	.002017
96	.001606	.001786	001966	.002146	.002341	.002522	.002702	.002882	.003062	
84	.002048	.002356	.002621	.002885	.003149	003435	.003700	.003964	.004228	.004492
42	.002515	.002887	.003322	.003694	.004067	:004439	.004843	.005215	.005588	.005961
84 42 85	.002766	.003247	.003728	.004289	. 004770	.005251	.005732	.006253	.006734	.007215
53	.002915	003529	,004143	.004756	.005472	.006086	.006700	.007313	. 007978	.008592
13	.002909	. 003604	.004363	.005122	.005881	.006766	007525	.008283	.009042	.009864
35	.002638	.003467	.004295	.005200	.006104	.007008	.008063	.008968	.009872	.010776
76	.002364	.003064	.004027	.004990	.006040	.007091	.008141	009367	.010417	.011468
09	.001814	.002721	.003527	.004636	.005745	.006954	.008163		.010784	.011993
99	.001369	.002054	.003081	.003993	.005248	.006504	.007873	.009242	.010611	.012208
06	.000886	.001518	.002277	.003416	.004428	.005819	.007211	.008729	.010247	.011765
00	.000556	.000973	.001668	.002502	.003753	. 004865	.006395	.007924	.009592	.011260
-	.000000	.000611	.001068	.001832	.002748	.004121	.005342	.007021	.008700	.010532
18		.000000	.000662	.001158	.001985	.002977	.004466	.005789	.007609	.009428
38	1.526398		.000000	.000713	.001248	.002140	.003210	.004815		.008202
14		1.654023		.000000	.000766	.001340	.002297	.003445	.005168	.006699
139			1.783152		.000000	.000819	.001433	.002456	.003684	.005526
				1.913937		.000000	.000872	.001527	.002617	.003926
-01					2.046542		.000000	000919	.001608	.002757
100			1.1			2.181126		.000000	.000959	.001678
.6			-		6 7		2.297847		.000000	.000999
								2.396845		.000000
1								1 .	2.498259	
										2.582218

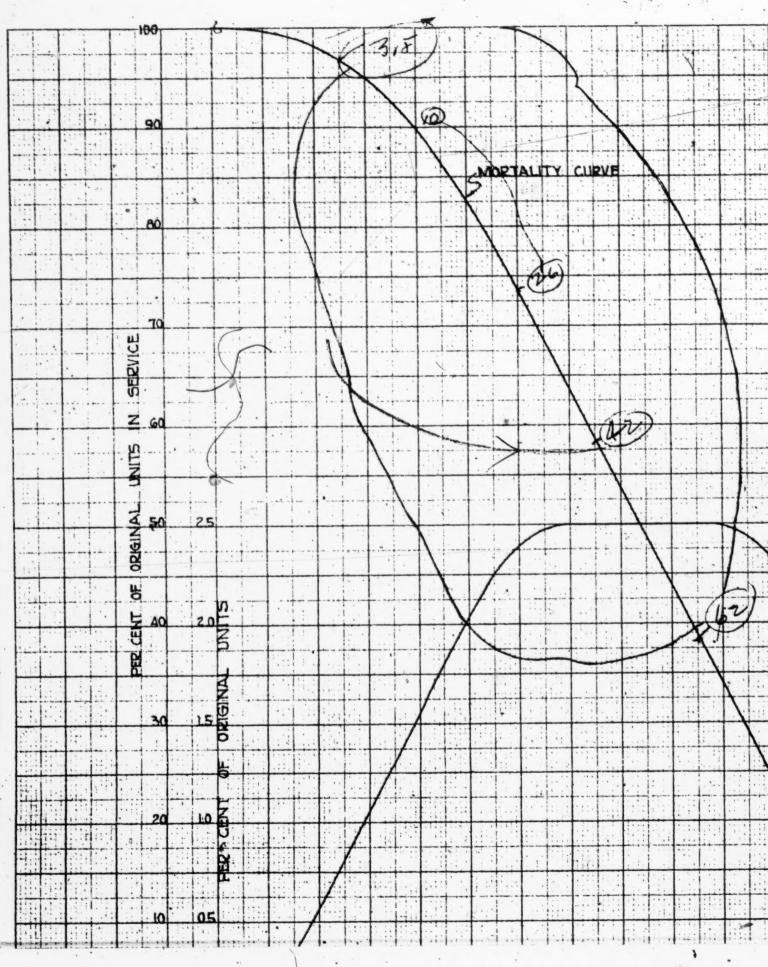
2162B
Plaintiff's Exhibit No. 7—Continued

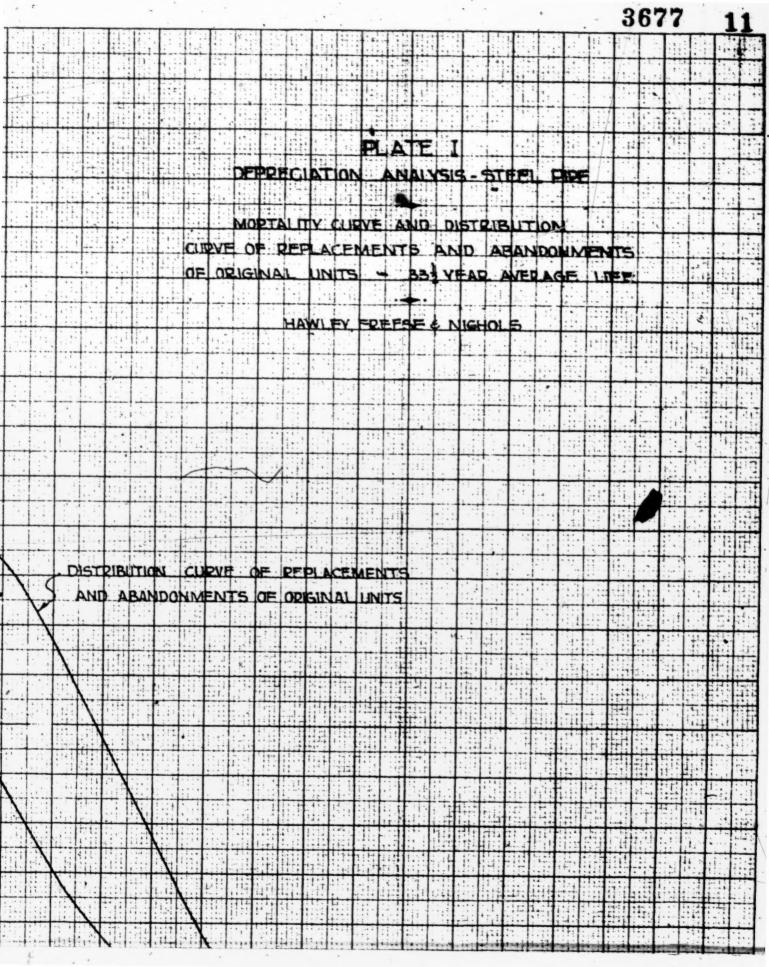
[fol. 3676] Including Replacements of Replacements

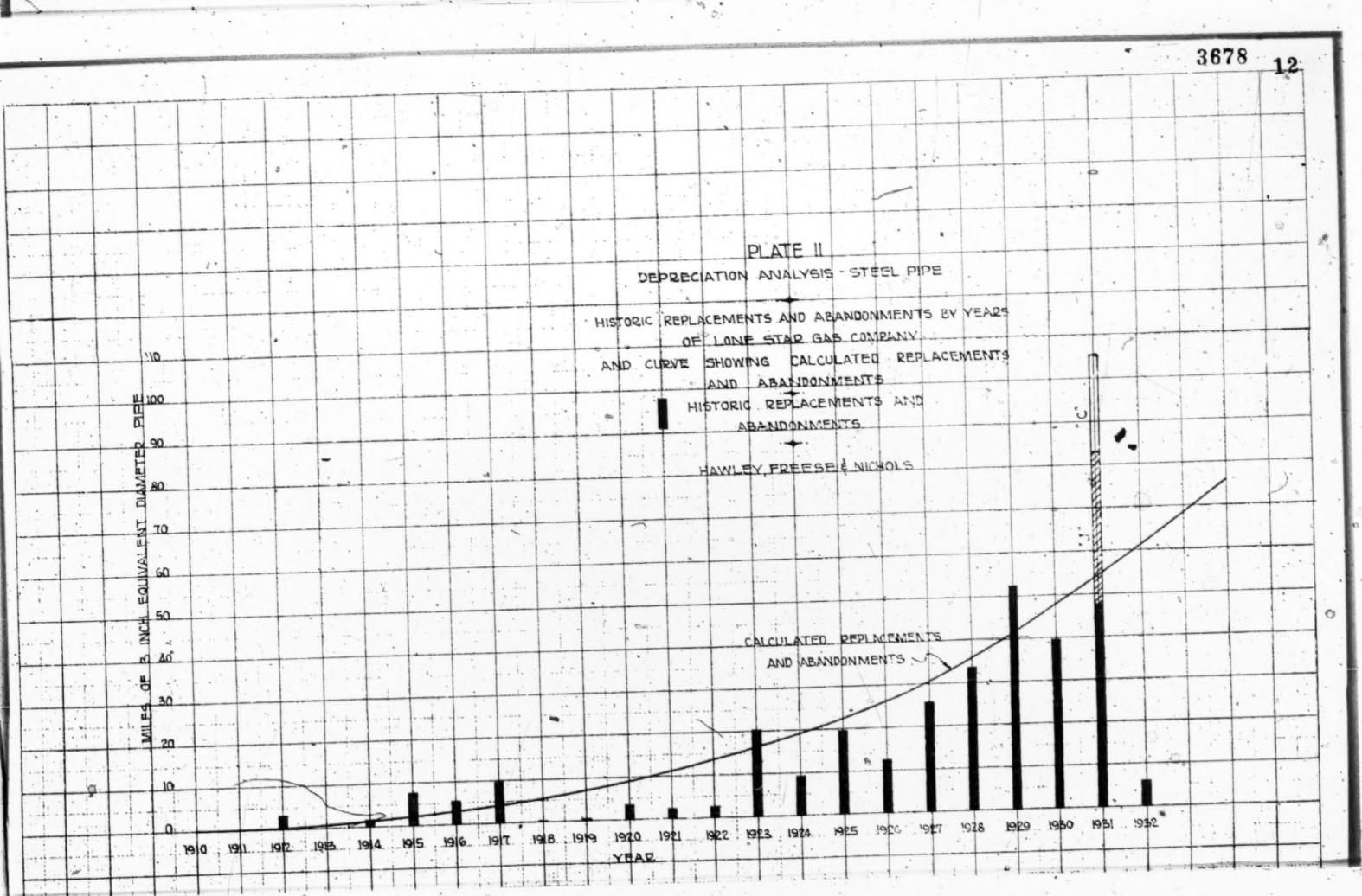
								64			•			)			
33½ Year	r Average L	ife Steel Pi	pe		6		•										
2.44	2.47	2.49	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.49	2.47	2.44
26 ·	27	28	29	30	31	32	. 33	34	35	36	37	38	39	40	41	42	43
2.46	2.48	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2:48	2.46	2.42 -
.000488 .001195 .002080 .003362 .004735 .006333 .007696 .009206 .010623 .011756	.000494	.000498	.000500	.000500	.000500	.000500	.000500	.000500	.000500	.000500	.000500	.000500	.000500	.000500	.000498	.000494	.000488
.001195	.001220	.001235	.001245	.001250	.001250	.001250	.001250	.001250	:001250	001250	.001250	.001250	.001250	.001250	.001250	.001245	.001235
.002080	.002152	.002197	.002224	.002242	.002251	.002251	.002251	.002251	.002251	.002251	.002251	.002251	.002251	.002251	.002251	.002251	.002242
.003362	.003467	.003587	.003662	.003707	.003737	.003752	.003752	.003752	.003752	.003752	.003752	.003752	.003752	. 003752	.003752	.003752	.003752
.004735	.004933	.005087	.005263	.005373	.005439	.005483	.005505	.005505	.005505	.005505	.005505	.005505	.005505	.005505	.005505	.005505	.005505
.006333	.006675	.006954	.007171	.007420	.007575	.007668	.007730	.007761	.007761	.007761	.007761	.007761	.007761	.007761	.007761	.007761	.007761
.007696	.008177	.008618	.008978	.009259	.009580	.009780	.009900	.009981	.010021	.010021	.010021	.010021	.010021	.010021	.010021	.010021	.010021
.009206	.009819	.010433	.010996		.011814	.012223	.012479	.012632	.012734	.012786	.012786	.012786	.012786	.012786	.012786	.012786	.012786
.010623	.011382	.012141	.012899	.013595	.014164	.014607	.015112	.015429	.015618	.015745	.015808	.015808	.015808	.015808	.015808	.015808	.015808
.011756	.012660	.013565	.014469	.015373	.016202	.016880	.017408	.018011	4018388	.018614	.018764	.018840	.018840	.018840	.018840	.018840	.018840
.012518	.013656	.014707	.015757	.016808	.017858	.018821	.019609	.020222	.020922	.021360	.0216_2	.021797	.021885	.021885	.021885	.021885	.021885
.013202 .013578 .013536 .012928 .012364	.014412	.015722	.016931	.018141	.019350	.020559	.021668	.022575	.023280	.024087	.024591	.024893	.025094	.025195	.025195	.025195	.025195
.013578	.014947	.016316	.017799	.019168	.020537	.021907	.023276	.024531	.025558	.026356	.027269	.027840	.028182	.028410	.028524	.028524	.028524
.013536	.015054	.016572	.018090	.019734	.021252	.022770	.024288	.025806	.027198	.028337	.029222	.030234	.030867	.031246	.031499	.031626	.031626
012928	.014874	.016542	.018211	.019879	.021686	.023354	.025022	.026690	.028358	.029888	.031139	.032112	.033224	.033919	.034336	.034614	.034753
.012364	.014196	.016332	.018164	.019996	.021827	.023812	.025643	.027475	.029307	.031139	.032818	.034191	.035260	.036481	.037244	.037702	.038007
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.010164	.012304	.014444	.016583	.019080	.021220	.023359	.025499	.027817	.029957	.032097	.034237	. 036376	.038338	. 620943	.041191	.042617	.043509
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.001749	:002998	.004497	.006745	.008744	.011492	.014240	.017238	.020236	.023234	.026731	.029729	.032727	.035725	.038973	.041971	.044969	.047967
.001033	.001808	.003099	.004648	.006972	.009038	.011878	.014719	.017817	.020916	.024015	.027630	:030728	.033827	.036926	.040283	.043381	.046480
.000000	.001060	.001854	.003179	.004768	.007152	.009271	012185	.015098	.018277	.021455	.024634	.028342	.031521	.034700	.037878	.041322	.044500
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			2.100210	2.822975	.000000	.001145	.002004	.003436	.005154	.007732	.010022	.013172	.016322	.019758	.023195	.026631	.030640
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,						Vis .	2.952824	2 001 100	.000000	.001221	.002137	.003663	.005495	,008242	.010684	.014042	.017400
				1				3.001430	2 050550	.000000	.001242	.002174	.003727	.005591	.008387	.010871	.014288
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										3.100110	3.162008	.000000	.001288	0.002254 0.001312	.003865	.005797	.008695
											3.102008	3.220428	.000000	.000000		.003936	.005905
												0.220428	3.280382	.000000	.001337	.002340	.004011
						٠							0.200002	3.342678	.000000	.001355	.002371
														0.012010	3 386920	.000000	000000

1	2.44	2.39	2.31	2.24	2.15	2.04	1.92	1.80 A	nnual Renewal Age in Ye	Factor
1	2.42	2.36	2.28	2.20	2.10	1.98	1.86		newals of Origi	ars nal Units
-	.000488	.000478	.000462	.000448	.000430	.000408	.000386	.000360	1	
	.001235	.001220	.001195	.001155	.001120	.001075	.001020	.000960	2	
	.002242	.002224	.002197	.002152	.002080	.002017	.001936	.001837	2 3	
	.003752	.003737	.003707	.003662	.003587	.003467	.003362	.003227	4	
	.005505	.005505	.005483	.005439	.005373	.005263		.004933	. 5	
	.007761	.007761	.007761	.005439	.007668	.007575	.007420	.007171	6	* 1
	.010021	.010021	.010021	.010021	.009981	.009900	.009780	.009580	.7	
	:012786	.012786	.012786	.012786	.012786	.012734	.012632	.012479	8	
	.015808	.015808	.015808.	.015808	.015808	.015808	.015745	.015618	. 9	
	. 018840	.018840	.018840	.018840	.018840	.018840	.018840	.018764	10	
	.021885	.021885	.021885	.021885	.021885	.021885	.021885	.021885	11	
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	.031626	.031626	031626	013626	.031626	.031626	.031626	.031626	13	
	.034753	.034753	.034753	.034753	.034753	.034753	.034753	.034753	15	
	.038007	.038160	.038160	.038160	.038160	.038160	.038160	.038160	16	*
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	.043509	.044044	.044400	.044579	.044579	.044579	.044579	.041551	17	
	.045743	.046700	.047274	.047657	.047848	047848	.047848		18	
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	.049404	.051472	.053080	054010	056067	056757	.054528	.054528	21	
ı	.048896	.051532	.053689	.054919 .055367	.056067	.056757	.057216	.057446	22	
		050064	059719	.055507	.057285	050700	.059202	.059681	. 23	
ı	.047967	.050964	.053713	055961	.057710	.059708	.060958	.061707	24	4
	.046480	.049579	.052677 .050857	0.055518 0.054036	.057842	059649 059334	.061715	.063006	25	
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	039329 $036486$	.042904	.046205	.049505	.052805	.056106	.059131	.061606	. 28	
į	.036486	.039829	.043449	.046792	.050134	.053476	.056818	.059882	29	
į	.033593	.036981	.040369	.044038	.047426 .044671	.050814	.054201	.057589	. 30	
PARTY SECTION	.030640	.034076	.037512	.040948	.044671	.048107	.051543	.054980	31	
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	.023918	.027461	.031595	.035139	.038682	.042225	.046064	.049607	. 33	
ă	.020710	.024316	.027913 .024726	.032115 028389 .025160	.035717	.039319	.042920	.046822	34	
SOURCE STATE	.017400	.021063	.024726	028389	.032662	.036325	.039988	.043652	35	
2022023	.014288	.017705	.021432	.025160	.028887	.033235	.036963	. 040690	36	
ă	.011067-	.014545	018023	.021818	.025612	.029407	.033833	.037628	37	•
8. 6	.008695	.011271	.014814	.018356	.022221	.026085	.029950	.034459	38	
Ę	.005905	.008857.	.011481	.015090	.018698	.022635	.026571	.030508	39	
ğ	.004011	.006017	.009025	.015090 .011699	.015376	.019053	.023064	.027076	40	
ğ	.002371	.004064	.006096	.009145	.011854	.015580	. 019305	:023370	41	•
ß.	.001373	.002403	.004120	.006179	.009269	.012015	.015792	.019568	42	
	.000000	.001384	.002423	.004153	.006229	.012015	.012113	.015920	43	
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Ş			3.461238		:000000	.001371	.002399	.004113	47	
8				3.453564		.000000	.001353	.002367	48	
					3.427102		.000000	.001335	49	
						3.381683		.000000	50	
屬				-		001000	3.337126	. 000000	. 00	

3.293218







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PAGE

## [fols. 3679-3681] Plaintiffs' Exhibit 8

# Lone Star Gas Company

Report on Effect of Degree Day Deficiencies on Revenue and Earnings for Years Ending December 31, 1933, March 31, 1934

# Covering Texas Operations Only

## Hawley, Freese and Nichols

# J. A. Phillips Co.

[fol. 3682]	Table of Contents	
	S	ide folio
Amount Availab	ole for Return	3683
Amount of 8¢ De	omestic Gate Rate Reduction	3684
Value of Compa	ny Produced Gas	3685
Effect of Degree	Day Deficiencies on Revenue	3686
Dallas Degree D	Day Deficiencies	3687
Ft. Worth Degr	ee Day Deficiencies	3688
Waco Degree D	ay Deficiencies	3689
	Day Deficiencies	3690
	e Day Deficiencies	3691
	Yearly Average	3692
Weighted DDD	Below Yearly Average Year Ending	
		3692
Degree Day Def	iciencies Year Ending March 31, 1934	3693
Weighted DDD	Below Yearly Average Year Ending	
	34	3694
Cubic Feet Per	Domestic Customer Per DDD	3695
Federal Income	Tax	3696

# Plaintiffs' Exhibit No. 8-Continued

[fo.l 3683] Amount Available for Return at 32¢ Domestic Gate
Rate after Correction to Normal Temperatures
Years Ending Dec. 31, 1933 and
March 31, 1934

	Revenues .	Year Er	nding
		3-31-34	12-31-33
	Revenues @ 40¢ Domestic Gate Rate Amount of 8¢ Domestic Gate Rate Re-	\$7,663,034.50	\$7,423,680.87
	duction	1,106,537.68	$^{\circ}$ 1,070,458.16
	Revenues @ 32¢ Domestic Gate Rate	\$6,556,496.82	\$6,353,222.71
•	Expenses		
	Gas Purchased	\$1,073,493.16	et 071 170 07
	Gathering Expenses.		\$1,071,170.87
	Compressing Station Expenses.	96,589.70	95,911.08
	Transmission System Expenses.	310,679.12	303,454.78
	Conoral Expenses	368,419.03	374,275.77
	General Expenses	733,121.58	754,282.79
	Federal Income Taxes	295,218.11	295,218.11
	tributed	3,221.27	3,223.15
	Bad Debts and Adjustments	5,155.29	5,210.33
	Miscellaneous Non-Operating Expenses	192.72	192.72
	Texas-Oklahoma Gas Sales Adjustment	62,234.07	29,617.92
		\$2,948,324.05	\$2,932,557.52
		\$3,608,172.77	\$3,420,665.19
	Depreciation	831,946.08	831,946.08
		00 770 000 CO	en 200 710 11
	Value of Company Produced Co.	\$2,776,226.69	\$2,588,719.11
	Value of Company Produced Gas	232,644.75	212,031.46
		\$2,543,581.94	\$2,376,687.65
	Temperature Correction	268,829.64	441.240.12
		\$2,812,411.58	\$2,817,927.77
	Federal Income Tax	97,534.45	96,073.64
		\$2,714,877.13	\$2,721,854.13
	Return on \$40,256,862.39	6.74%	6.76%
		1	
	[fol. 3684]		
	Amount of 8¢ Domestic Gate	e Rate Reduction	1
	· For Twelve Months Pe	riods Ended	
		3-31-34	12-31-33
	Total Domestic Gas Sales—Texas:	12 021 701	
	Rate Reduction	13,831,721	13,380,727
	nate reduction	.08	.08
	Amount of 8¢ Domestic Gate Rate Re-	5	
	duction	\$1 106 527 co	£1 070 450 10
	ducuous	\$1,106,537.68	e1,070,458.16

# Plaintiffs' Exhibit No. 8-Continued

[fol. 3685]

Value of Company Produced Gas

Year 1933	M.C.F.	Average Price	Amount
Quarter ended       3-31-33         Quarter ended       6-30-33         Quarter ended       9-30-33         Quarter ended       12-31-33	2,063,563 962,570 1,026.522 1,379,600	\$.0406 .0377 .0368 .0392	\$83,800.03 36,316.23 37,752.27 54,162.93
Total	5,432,255	\$.0390	\$212,031.46
Twelve Months Ende	d March 31,	1934	
Quarter ended       6-30-33         Quarter ended       9-31-33         Quarter ended       12-31-33         Quarter ended       3-31-34	$\substack{962,570\\1,026,522\\1,379,600\\2,511,597}$	\$.0377 .0368 .0392 .0415	\$36,316.23 37,752.27 54,162.93 104,413.22
Totál	5,880,289	\$.0396	\$232,644.65

[fol. 3686]

## Effect of Degree Day Deficiencies on Revenue

			Revenue for Average
DDD Below Average			Temperature Year Gas @ \$0.26
	*.		
540	18.63	196,421	\$513,768.97
540	*16.00	196,421	441,240.12
329	18.63	1196,421	313,018.52
329	*16.00	1196,421	268,829.64
	Below Average 540 540 329	DDD C.F. per Below Customer Average per DDD 540 18.63 540 *16.00 329 18.63	DDD C.F. per Domestic Below Customer Customers Average per DDD in Texas 540 18.63 196,421 540 *16.00 196,421 329 18.63 †196,421

<sup>\*</sup> Figures testified by P. M. Biddison, Sherman Transcript, page 356.

<sup>†</sup> Used same as for year ending Dec. 31, 1933.

Plaintiffs' Exhibit No. 8—Continued

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Plaintiffs' Exhibit No. 8—Continued

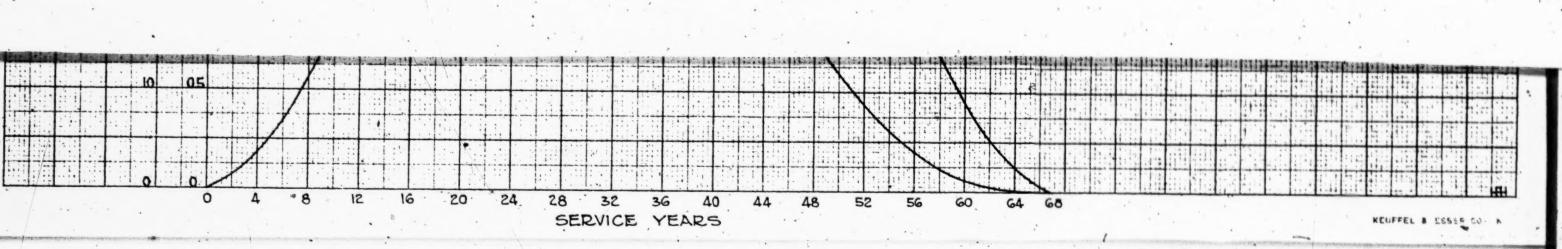
Ending Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. Tr. 323 515 224 73 4 0 0 0 0 0 0 0 378 849 258 267 238 388 21 144 29 0 0 0 0 0 0 0 0 378 82 259 257 238 389 271 195 4 0 0 0 0 0 0 0 0 0 0 288 258 259 258 258 258 258 258 258 258 258 258 258	Year Ending  Degree Day Deficiencies Based on Average Daily Temperatures Below 65°.  Year Ending  Doe, 31  Degree Day Deficiencies Based on Average Daily Temperatures Below 65°.  Year Ending  Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. 71  528 267 375 4 0 0 0 0 0 0 0 378 378 258 259 259 259 259 259 259 259 259 259 259																
Ending         Jan.         Feb.         May         June         July         Aug.         Sept.         Oct.         Nov.         Dec.         Tr.           e. 31         323         515         224         73         May         June         July         Aug.         Sept.         Oct.         Nov.         Dec.         Tr.         378         604         2.         378         604         2.         450         378         604         2.         378         604         2.         450         18         238         2.         480         18         460         1         7         0         378         604         2.         480         18         60         0         0         0         0         16         238         545         2.         480         18         60         <	Ending Jan Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. 77    223 515 224 73 42 0 0 0 0 0 0 0 39 165 248 25 24    224 228 237 137 142 29 0 0 0 0 0 0 29 165 248 25 24    225 247 137 142 29 0 0 0 0 0 0 29 165 248 25 24    226 227 137 145 29 0 0 0 0 0 0 0 29 165 24    227 137 145 29 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	fol. 36881					Ft. W	orth, 7	Гехав								
Vear Ending         Jan.         Feb.         Mar.         Apr.         May         July         Aug.         Sept.         Oct.         Nov.         Dec.         TT           Dec. 31         323         515         224         773         4         0         0         0         1         70         378         490         1         70         378         491         378         492         4         1         0         0         0         0         0         0         0         1         70         378         494         2         491         389         217         491         388         210         0	Vear Ending         Jan         Feb.         Mar.         Apr.         May         June         July         Aug.         Sept.         Oct.         Nov.         Dec.           Dec. 31         323         515         224         73         4         0         0         0         1         70         340 <t< td=""><td></td><td>I</td><td>egree Da</td><td>v Deficie</td><td>cies</td><td>uo pa</td><td>Avera</td><td>ge Dai</td><td>ily Ter</td><td>nperatu</td><td>res B</td><td>elow 65</td><td></td><td></td><td></td><td></td></t<>		I	egree Da	v Deficie	cies	uo pa	Avera	ge Dai	ily Ter	nperatu	res B	elow 65				
100c, 31   323, 155   2244   73   4   70   0   0   0   0   0   0   0   0	1906, 31   333   1560   224   73   74   75   76   778   844   72   74   74   74   74   74   74	Year Ending		400	Mor		×		June.	Ju.		ug.	Sept.	Oct.	Nov.	Dec.	Total
528         515         724         73         4         73         4         73         4         73         4         73         4         73         4         73         4         73         4         73         4         73         4         73         4         73         4         73	528         515         724         73         73         74         74         73         74<	Dec. 31	Jan.	rep.	Mar.	· ide	747	· ·				9 0	-	o	910	340	1 697
528         526         475         142         29         0         0         0         29         165         433         29           924         238         307         45         42         0         0         0         0         6         482         483         23           924         238         303         0         0         0         0         0         482         485         52         29         482         545         23         523         29         523         29         482         523         29         66         0         0         0         0         0         482         58         523         29         66         0         0         0         0         47         37         303         523         29         0	528         207         375         442         29         0         0         0         29         165         433         27         433         29         433         29         433         29         433         29         433         29         433         29         433         29         433         29         433         29         448         48         60         0         0         0         60         62         482         483         523         29         482         53         29         53         29         54         55         29         29         29         29	1933	323	515	224	73		4.0	0			00	-	20	378	664	2,325
471         322         413         144         29         0         0         0         0         10         89         258         545         29           591         727         197         38         8         0         0         0         0         47         306         258         545         25         25         25         458         25	924 238 303 144 29 0 0 0 10 89 258 545 27 59 1   604 228 308 211 195 4 0 0 0 0 0 0 47 326 558 2468 25   605 294 386 159 27 0 0 0 0 0 0 47 326 52   606 273 145 95 8 0 0 0 0 0 6 24 32   726 514 49 95 86 0 0 0 0 0 0 0 0 10 58 217 642 2   726 514 284 286 159 27 0 0 0 0 0 0 0 0 10 58 217 642 2   727 150 150 121 15 0 0 0 0 0 0 0 10 58 217 642 2   728 514 286 150 121 15 0 0 0 0 0 0 0 10 58 217 642 2   728 514 286 150 121 15 0 0 0 0 0 0 0 10 58 217 640 2   728 514 286 150 121 15 0 0 0 0 0 0 10 52 166 423 1   728 74 392 151 125 15 15 16 0 0 0 0 0 15 21 16 423 1   728 74 392 151 125 15 16 0 0 0 0 0 15 21 16 423 1   728 745 172 186 42 0 0 0 0 0 0 15 21 16 423 1   728 745 172 186 42 0 0 0 0 0 15 171 1   729 751 493 103 16 0 0 0 0 0 0 10 12 1   729 751 493 103 16 0 0 0 0 0 0 10 12 18 60 2   729 751 493 103 16 0 0 0 0 0 10 12 18 60 2   720 751 751 751 751 751 751 751 751 751 751	1932.	528	267	375	4.5		0			*.	00	-	200	165	433	2,00g
924         238         303         0         0         0         0         62         482         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         458         553         2         2         2         2         2         2         2         2         2         2         2         2	924 238 303 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1931	471	322	413	144	7		0	•		0	9	000	020	244	9, 267
591         727         197         38         8         0         0         0         47         385         59           690         380         271         195         4         0         0         0         0         47         386         59         59         48         27         0         0         0         0         0         0         47         386         52         52         52         37         38         37         38         37         37         38         37         37         38         36         0 <td>691 727 197 38 8 0 0 0 0 67 472 458 57 58 57 58 57 58 57 58 57 58 57 58 57 58 57 58 57 58 57 58 57 58 58 58 58 58 58 58 58 58 58 58 58 58</td> <td>. 0801</td> <td>924</td> <td>238</td> <td>303</td> <td>0</td> <td></td> <td> 0</td> <td>0</td> <td></td> <td></td> <td>0</td> <td>2</td> <td>68</td> <td>207</td> <td>040</td> <td>00,00</td>	691 727 197 38 8 0 0 0 0 67 472 458 57 58 57 58 57 58 57 58 57 58 57 58 57 58 57 58 57 58 57 58 57 58 58 58 58 58 58 58 58 58 58 58 58 58	. 0801	924	238	303	0		0	0			0	2	68	207	040	00,00
491         396         211         195         4         0         0         0         47         326         523         27         66         20         0         0         0         0         47         57         305         57         20         523         27         56         57         306         57         306         57         27         57         305         57         27         57         305         57         27         57         305         57         27         57         305         57         27         57         305         57         27         57         57         305         57         27         57         47         57         57         47         57         57         47         57	Fig. 1   Strict   S	1000	501	727	197	38		80	0		_	0	0	62	487	408	2,000
596         386         278         69         6         0         0         16         23         145         642         2           625         294         386         159         27         0         0         0         0         204         378         587         2           666         273         145         24         38         0         0         0         0         204         378         587         2           726         521         449         95         36         0         0         0         0         10         587         279         179         170	590         278         69         6         0         0         16         23         145         642         2           625         294         386         159         27         0         0         0         16         23         145         27           666         273         145         24         38         0         0         0         0         10         204         278         537         2           726         521         449         95         36         0         0         0         0         10         58         217         642         2           431         423         246         2         0         0         0         0         16         204         278         217         640         2         2         16         2         2         16         2         2         16         2         2         16         2         2         16         2         2         16         2         2         16         2         2         16         2         2         16         2         2         16         2         2         16         2         2 <td></td> <td>107</td> <td>200</td> <td>911</td> <td>105</td> <td></td> <td>4</td> <td>C</td> <td></td> <td></td> <td>0</td> <td>0</td> <td>47</td> <td>326</td> <td>523</td> <td>2,195</td>		107	200	911	105		4	C			0	0	47	326	523	2,195
C25         294         386         159         27         0         0         7         57         303         537         27         27         284         386         159         27         0         0         0         0         0         0         204         278         537         27         27         284         386         27         38 <t< td=""><td>656         274         386         159         27         0         0         7         57         303         537         27</td><td>1928</td><td>184</td><td>0000</td><td>020</td><td>80</td><td></td><td>4 65</td><td>0</td><td></td><td></td><td>0</td><td>16</td><td>23</td><td>145</td><td>642</td><td>2,149</td></t<>	656         274         386         159         27         0         0         7         57         303         537         27	1928	184	0000	020	80		4 65	0			0	16	23	145	642	2,149
625         294         389         159         27         159         27         159         27         159         27         159         27         159         27         159         27         145         28         27         145         28         27         145         28         27         145         28         145         28         145         28         145         28         145         28         145         27         146         27         27         27         27         27         27         27         27         27         27         401         27	666         274         386         199         27         60         0         0         204         278         587         27           726         514         449         95         36         0         0         0         0         10         58         217         642         2           726         514         449         95         36         0         0         0         0         10         58         217         460         27         460         27         460         27         460         27         460         27         460         27         460         27         460         27         460         27         460         27         460         27         460         27         460         27         460         27         460         27         47         23         16         47         48         477         23         16         47         48         477         23         477         23         48         477         23         477         23         477         23         477         23         477         23         477         23         477         23         477	1927	280	280	212	00.	0	10				7	1	57	303	537	2,375
666         273         145         24         8         0<	666         273         145         24         8         0<	1926	625	294	386	ACT.	7	-	0			0	- 0	200	970	597	9,185
726         514         449         95         36         0         0         10         158         217         652         27         460         460         460         460         460         460         460         460         460         460         460         460         460         460         47         29         47         29         47         29         47         29         47         29         47         29         47         29         47         29         47         29         47         29         47         29         47	726         514         449         95         36         0         0         10         58         217         460         27         460         27         461         27         461         27         461         27         461         27         461         27         461         27         461         27         461         27         461         27         461         27         461         27         461         27         461         27         461         27         461         27         461         27         461         27         461         27         461         27         47         47         27         47         47         47         47         27         47         47         27         27         28         27         47         27         27         28         27         47         27         28         27         47         27         27         28         27         47         27         28         27         28         27         28         27         28         27         28         28         28         28         28         28         28         28         28         28	1005	999	273	145	24		00	0			0	0	100	010	100	1,10
370         521         353         52         9         0         0         0         166         276         460         276         460         276         460         276         460         276         460         276         461         276         461         276         461         276         461         276         461         276         461         276         461         276         461         276         461         276         477         276         477         277         278         477         277         278         278         278         278         278         278         278         278	370         521         353         52         9         0         0         0         166         276         440         2.7         440         440         440         440         441         2.7         441         2.7         441         2.7         441         2.7         441         2.7         441         2.7         441         2.7         441         2.7         441         2.7         441         2.7         441         2.7         441         2.7         441         2.7         441         2.7         441         2.7         441         2.7         441         2.7         441	1004	796	514	449	95	ಣ	. 9	0	_	•	0	01	28	212	042	2,141
431 357 150 121 15 0 0 0 0 0 52 166 423 1, 257 401 2, 258 6496 278 75 15 15 15 15 15 15 15 15 15 15 15 15 15	684         394         286         64         2         0         0         61         257         401         2           431         357         150         121         15         0         0         0         0         61         257         166         423         1           687         423         279         125         23         0         0         0         0         6         6         423         1           687         426         279         125         23         0         0         0         0         4         67         348         647         23           596         426         282         165         50         0         0         0         15         477         29         477         29           577         416         172         156         42         0	1974	920	103	252	52		0	C	_	-	0	0	166	276	460	2,207
684         394         286         394         286         423         17         423         17         423         17         423         17         423         17         423         17         423         17         423         17         423         17         423         17         423         17         423         17         423         17         423         47 </td <td>684         394         289         289         1         1         68         402         522         2         2         1         2</td> <td>1928</td> <td>200</td> <td>170</td> <td>200</td> <td>900</td> <td></td> <td>00</td> <td>•</td> <td></td> <td></td> <td>-</td> <td>c</td> <td>61</td> <td>257</td> <td>401</td> <td>2.149</td>	684         394         289         289         1         1         68         402         522         2         2         1         2	1928	200	170	200	900		00	•			-	c	61	257	401	2.149
431 357 150 121 13 0 0 0 10 68 402 522 2 2 687 423 279 125 23 0 0 0 15 61 352 477 2 2 688 402 278 75 16 125 7 0 0 0 15 61 352 477 2 2 6 67 348 647 2 2 6 7 348 647 2 2 6 7 348 647 2 2 6 7 348 647 2 2 6 7 348 647 2 2 6 7 348 647 2 2 6 7 348 647 2 2 6 7 348 647 2 2 2 2 2 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0	431         357         150         121         13         0         0         0         4         68         402         522         2         2         2         2         2         2         2         2         2         348         647         2	1922	684	584	007	5	•					0	0	50	166	423	1,715
687 423 279 125 23 0 0 4 67 348 647 27 5 16 5 10 0 0 15 51 352 477 2 515 51 352 477 2 515 515 454 282 155 156 42 0 0 0 15 51 51 352 477 2 515 51 51 352 477 2 515 51 51 352 477 2 515 51 51 352 477 2 515 51 51 51 51 51 51 51 51 51 51 51 51	687         423         279         125         23         0         0         4         67         348         647         2           596         496         278         75         16         5         0         0         15         51         352         477         2           515         496         278         175         16         0         0         1         171         229         751         2           515         496         172         103         89         0         0         0         27         218         439         2           607         356         566         59         12         0         0         0         0         27         218         439         2           607         356         566         59         112         0	1921	431	357	150	121	-		0			0	9	9	400	663	9, 530
596         496         278         75         16         5         0         0         15         51         352         477         27           874         382         151         125         7         0         0         0         1         771         229         751         2         751         2         751         2         751         2         751         2         3         0	596         496         278         75         16         5         0         0         15         51         352         477         27           874         382         151         125         7         0         0         0         1         171         229         751         2           515         454         282         103         89         0         0         0         1         171         229         751         2         355         525         2         2         2         2         6         0 <td< td=""><td>1920</td><td>687</td><td>423</td><td>279</td><td>125</td><td>.7</td><td></td><td>0</td><td></td><td>2</td><td>0</td><td>2,</td><td>000</td><td>940</td><td>647</td><td>0,00</td></td<>	1920	687	423	279	125	.7		0		2	0	2,	000	940	647	0,00
874         392         151         125         7         0         0         15         51         229         751         2           515         454         282         103         89         0         0         0         1         171         229         751         2           515         454         282         103         89         0         0         0         27         218         439         2           607         356         566         59         12         0         0         0         0         27         218         439         2           77         356         566         59         12         0         0         0         0         0         98         252         788         2           591         593         103         16         0         0         0         0         0         0         130         415         616         2           524         578         103         0         0         0         0         0         144         138         651         2           545         419         237         113         20<	874         392         151         125         7         0         0         15         51         229         751         2           515         454         282         103         89         0         0         0         1         171         229         751         2           572         475         172         156         42         0         0         0         27         218         439         2           607         356         566         596         12         0         0         0         0         27         218         439         2           591         582         325         122         23         0         0         0         0         98         252         788         2           591         583         343         146         116         0         0         0         0         0         130         415         616         2         5         2         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         7         3 <t< td=""><td>1010</td><td>596</td><td>496</td><td>278</td><td>75</td><td>_</td><td>. 9</td><td>2</td><td></td><td>0</td><td>0</td><td>4</td><td>701</td><td>040</td><td></td><td>20,00</td></t<>	1010	596	496	278	75	_	. 9	2		0	0	4	701	040		20,00
515         454         282         103         89         0         0         0         1         171         229         751         27         175         255         275         275         275         255         275         255         275         275         275	515         454         282         103         89         0         0         1         171         229         751         229         751         229         751         229         751         229         751         229         751         229         751         229         751         229         751         229         752         235         255         25 <th< td=""><td>1010</td><td>874</td><td>392</td><td>151</td><td>125</td><td></td><td>1</td><td>0</td><td></td><td>0</td><td>0</td><td>15</td><td>10</td><td>305</td><td>75</td><td>7,7</td></th<>	1010	874	392	151	125		1	0		0	0	15	10	305	75	7,7
572         475         172         156         42         0         0         8         62         355         525         2           607         356         566         56         12         0         0         0         27         218         439         2           377         582         325         122         23         0         0         0         98         252         788         2           591         593         396         116         4         0         0         0         98         252         788         2           757         571         493         103         16         0         0         0         9         61         298         605         2           524         578         103         89         34         0         0         0         104         229         525         2           545         *419         237         113         20         0         0         0         104         229         525         2           580         435         238         295         18         0         0         0         119	572         475         172         156         42         0         0         8         62         355         525         2           607         356         566         59         12         0         0         0         27         218         439         2           377         582         325         122         23         0         0         0         9         27         218         439         2           757         581         583         395         116         4         0         0         0         9         61         298         605         2           757         571         493         103         16         0         0         0         0         130         415         605         2           524         578         103         89         34         0         0         0         104         229         655         2         2         45         138         651         2           545         -419         237         133         2         45         13         651         2         2         45         13,783         58	0101	7 7 7	AKA	686	103	٠	6	0	_	0	0	1	171	677	751	2,575
577         356         566         59         12         0         0         0         27         218         439         2           377         582         325         122         23         0         0         0         0         98         252         788         2           591         593         395         116         4         0         0         0         26         185         135         602         2           757         571         493         103         16         0         0         0         0         130         415         605         2           524         578         103         89         34         0         0         0         104         229         651         2           545         •419         237         113         20         0         0         0         104         229         651         2           5545         •419         237         113         20         0         0         0         14         229         651         2           580         435         288         295         18         0         0	577         356         566         59         12         6         0         0         27         218         439         28           377         585         566         59         12         0         0         0         0         98         252         788         2           591         583         395         116         4         0         0         0         26         185         135         602         2           757         571         493         103         16         0         0         0         0         130         415         506         2         2         616         2           524         578         103         89         34         0         0         0         104         229         616         2           545         *419         237         113         20         0         0         0         104         229         651         2           550         *45         *45         138         651         2         45         138         651         2           25         *7** Av         *580         *435         *28         *95<	1917	010	101	170	2	, 4	9	0		0	0	00	62	355	525	2,347
607         580         590         590         592         252         788         2           377         582         325         122         23         0         0         0         26         185         135         602         2           591         583         385         116         4         0         0         0         26         185         185         602         2           524         571         493         103         16         0         0         0         130         415         616         2         616         2         616         2<	Totals         14,484         10;882         7,197         2,377         483         10         0<	1916	276	410	711	201	-	90				0	0	27	218	439	2.284
Totals         14,484         10,882         7,77         137         2,377         2,377         4,93         116         4         0         0         0         26         185         135         602         2           7,57         571         493         116         4         0         0         0         0         130         415         616         2           549         574         578         103         16         0         0         0         0         104         229         625         2           554         578         103         89         34         0         0         0         104         229         525         2           545         419         237         113         20         0         0         0         104         229         525         2           550         45         419         237         45         138         651         2         2         6,812         13,783         58           25 Yr. Av.         580         435         288         95         18         0         0         0         119         1,975         6,812         13,783	Totals.         14,484         10,882         7,197         2,377         483         135         132         23         135         602         2	1915	200	300	2000	ac.	- 0	90				0	-	00	959	788	2.567
Totals.  Tot	Totals         14,484         10,882         7,197         2,377         453         18         0         0         0         0         10         20         10         20         10         20         10         20         10         20         10	1914	377	289	3.72	77.1		3.	0	-	-		96	105	125	609	9,647
757 571 493 103 16 0 0 0 0 130 415 616 2 419 343 146 115 19 0 0 0 0 104 229 525 2 545 419 237 113 20 0 0 0 2 45 138 651 2 Totals	Totals         14.484         10.882         7.197         2.377         453         16         0         0         0         0         0         130         415         0         0         0         104         229         526         2         25         25         25         25         25         25         25         25         25         25         2         45         138         651         2         25         2         45         138         651         2         2         45         138         651         2         2         2         45         138         651         2         2         45         138         651         2         2         2         45         138         651         2	1013	. 591	593	395	116		4	0		0	0	80	100	000	200	0,0
419 343 146 115 19 0 0 0 0 130 415 010 2 524 578 103 89 34 0 0 0 0 2 45 138 655 2 545 •419 237 113 20 0 0 0 2 45 138 651 2 Totals.  Totals.  No Record Available.	Totals.  Totals.  Totals.  25 Yr. Av.  26 Yr. Av.  27 Yr. Av.  28 Yr. Av.  28 Yr. Av.  28 Yr. Av.  28 Yr. Av.  29 Yr. Av.	1019	757	571	493	103		9	0	-	0	0	3	10	287	900	2,010
Totals.  No. Record Available.	Totals	707	410	242	148	115		6	0	_	0	0	0	130	415	919	2,203
Totals No Record Available.	Totals	1911	418	010	201	000	1 67	2	-			0	0	104	229	525	2,186
245 419 237 113 20 0 0 119 1,975 6,812 13,783 58 18 0 0 0 5 79 272 551 2	45 419 237 113 20 0 0 119 1,975 6,812 13,783 58 580 435 288 95 18 0 0 0 0 0 5 79 572 551 2 551 2	1910	574	2/2	100	80.	26	2 2				-	6	45	138	651	2,170
10,882 7,197 2,377 453 5 0 0 119 1,975 6,812 13, 80 435 288 95 18 0 0 0 5 79 272 13, 80 4 435 4 4 4 5 18 0 0 0 5 79 272	184 10,882 7,197 2,377 453 5 0 0 119 1,975 6,812 13, 80 435 288 95 18 0 0 0 5 5 79 272 13, ecord Available.	1909	545	.419	7.27	113		2	>				3	2			
180 435 288 95 18 0 0 0 5 79 272	580 435 288 95 18 0 0 0 5 79 272 ecord Available.	Totals	14 484	10.882	7.197	2.377	4.	1 63	2		0	0	119	1,975	6,812	13,783	58,087
prope	ecord	25 Yr. Av.	580	435	288	95		. 00	0		0	0	22	40	272	551	2,32
	2000	On Vace Australy	To Recor	-	9												

Plaintiffs' Exhibit No. 8—Continued

Waco, Texas

fol. 3689]

		1	Degree Day		Deficiencies Based on Average Daily	ed on Av	erage Da	H	emperatures I	Below 65°	F	•		
	Year Ending	,												•
	Dec. 31	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
1933		294.6	462.8	158.1	51.5	1.5	0	0	0	0	2.0	180.4	294.7	1445.6
1932		485.5	234.1	372.0	33.5	0	0	0	0	0	9.02	368.4	616.9	2181 0
1931		481.7	292.2	387.7	126.0	17.1	0	0	0	0	16.6	156.5	453.6	1931.4
1930		878.3	236.2	308.9	Q	0	0	0	0	00	73.7	261.8	575.4	2335.1
1929		545.9	669.2	188.2	21.3	13.8	0	0	0	0	53.9	444.8	501.4	2438.5
1928	**************	478.2	415.2	194.4	175.9	2.0	0	0	0	0	45.8	304.9	501.6	2118.0
1927	*************	505.9	277.7	261.0	59.3	8.5	0	0	0	9.5	19.8	93.6	619.1	1854.4
1926	*************	676.7	256.8	339.6	134.2	0.9	0	0.	0	3.3	23.4	. 317.0	495.0	2252.0
1925		623.6	243.1	110.9	26.3	5.5	0	0	0	0	202.1	272.0	590.8	2074 3
1924		676.3	484.4	400.3	8.92	18.7	0	0	0	7.0	54.8	203.6	523.9	2445.8
1923	1923	261.8	476.7	377.5	72.0	2.0	0	0	0	0	116.9	286.5	427.4	2020.8
1922		627.7	340.0	271.3	50.8	2.5	0	0	0	0	51.4	224.4	348.5	1916.6
1921		335.8	294.9	103.2	98.3	7.3	0	0	0	0	47.2	167.4	411.1	1465.2
788		615.7	. 318.5	245.3	0.94	5.0	0	0	0	7.0	78.3	367.3	470.5	2183.6
. 1919		. 566.1	425.9	223.3	28.4	7.8	50	0	0	7.5	36.4	306.9	557.3	2165.1
1918		758.8	376.4	129.8	82.1	7.0	0	0	0	5.3	39.1	332.1	465.1	2197.7
1917		451.7	366.1	242.6	80.3	8. 29	0	ò	0	0	161.0	223.9	617.2	2210.6
1916		484.2	379.1	9.901	108.5	19.1	0	0	0	0.9	59.3	309.8	445.1	1917.7
1915	1915	561.3	291.3	503.1	67.5	6.5	0	0	0	0	0.61	200.5	403.7	2052.7
1914		370.1	502.1	316.7	94.2	00 60	0	0	0	0	79.5	219.5	707.4	2297.8
	Total	10679.9	7344.7	5240.5	1462.7	206.4	5.5	0	0	46.4	1250.8	5241.3	10025.7	41503.9
L	20 Yr. Average	534	368	262	73	10	0	0	0	2	63	262	501	2075



Plaintiffs' Exhibit No. 8-Continued

Abilene, Texas

	Total 1955 2653 2653 2481 2481 2535 2535 2501 3050 2661 2481 2481 2481 2481 2481 2951 2951	38600
	Dec. 415 729 573 682 584 587 707 597 670 6599 5590 483 478	8951 597
	Nov. 242 406 240 340 532 389 381 351 267 381 472 472 433	5153 344
	Oct. 3 142 46 1119 1011 64 254 254 104 58 88 88	1463
COM MOTO	Sept. 30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	161
racmes r	Aug	00
y rempe	July 000000000000000000000000000000000000	0.0
age Dan	June .	18
l on Avel	May 88 39 111 122 122 140 140 140 140 140 140 140 140 140 140	259
ies Basec	Apr. 95 95 95 95 95 95 95 95 95 95 95 95 95	1536
Deficien	Mar. 232 453 468 468 468 340 387 477 1142 477 477 128 288 288 288 288 288 288 288 288 288	4850
Degree Day.	Feb. 295 257	6573
De	Jan. 403 605 605 605 774 991 731 731 746 7459 7459 7459 7459 7459 7459 7459 7459	9636
	Year Ending Dec. 31 Dec. 31 1933 1932 1930 1928 1927 1928 1927 1924 1923 1924 1923 1927	Total
)4		

Plaintiffs' Exhibit No. 8-Continued

-
0
8
8
.0
Same.

Degree Day Deficiencies Based on Average Daily Temperatures Below 65° F

Sherman, Texas

Year Ending												, ,	
Dec. 31	Jan.			Apr.	May	June		Aug.	Sept.	Oct.	1.	De.	Total
333	421			73	1	0 .		0	0	œ		420	1994
132.	601			19	2	0		0	0	200		722	2565
	544			141	32	0		0	0	47		480	2012
030	1002		۸.	. 2	0	0		0	4	8		627	260.4
	208		_	36	000	0		0	18	8		480	2855
	588			181	23	2		0	0	73	*	638	2705
	202	*		8	00	0		0	111	14		697	2431
	714			222	. 18	0		0	. 27	67		681	3002
25.	739			88	21	0		0	0	238		656	2580
	802			. 91	31	0		0	11	61		726	3074
23.	372			8	12	0		0	0	162		498	2474
	099		_	.09	03	0		0	0	49		453	2120
21.	391			16	0	0		0	0	36		400	1550
08	718			117	25	0		0	00	62	1.	506	2551
10	673		_	74	17	9		0	00	52		694	2737
Total	9640	6713	4758	1331	199	000	0	0	82	1130	4888	8714	37463
15 Yr. Average	643		0	. 68	13	-		0	10	75		581	2498

Note.—Records 1927-1933 Inclusive @ Gainesville. 1919 Inclusive @ Gainesville.

[fol. 3692]	Determinat	ion of Weigh	ted DDD Bel	etermination of Weighted DDD Below Yearly Average	rage		
		Year End	ling Dec. 31, 1				
Dallas. Ft. Worth Waco Abilene. Sherman	Average Yearly DDD 2328 2323 2075 2573 2498	DDD 1933 1850 1697 1446 1955 1994	DDD Below Average 476 626 629 618 504	Approx. No. of Customers 65,000 33,000 10,000 6,000 4,000	Ratio of Customers .552 .279 .084 .051 .053	Weighted DDD Below Average 263 175 53 32 17 17 53	Weighted Average Yearly DDD 1284 648 174 131 85 2322
1933 Weighted DDD Below Average							Otto
חחח ביני שייייי						,	1782

1933 Weighted DDD..

[fol. 3693]

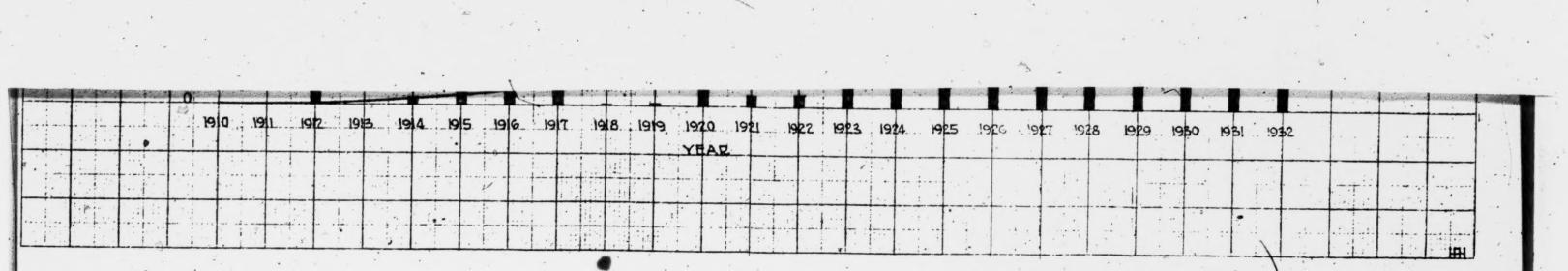
Degree Day Deficiencies

Based on Average Daily Temperatures Below 65° F

Year Ending March 31, 1934

DDD Below Average 269 409 374.2 442 358
Diverse Av 1 2326 Av 2323 44 2075 3 2573 4 2498 3
Area
Total 2057 1914 1700.8 2131 2140
March 348 339 228.6 369
Feb. 440 440 460 454
Jan. 529 500 458.6 539 540
Dec. 361 340 294.7 415
Nov. 225 210 160.4 242 266
0 Cct.
Sept.
June
May 5.1.5 1.5
April 105 73 51.5 95 73
Dallas

· Taken at Gainesville.



# Plaintiffs' Exhibit No. 8-Continued

[fol. 3694]
Determination of Weighted DDD Below Yearly Average
Year Ending March 31, 1934

	Ratio of Customers	DDD Below Average	Weighted DDD Below Average
Dallas Ft. Worth Waco	.552 .279 .084	269 409 374 2	149 114 • 31
Abilene	.051 .034	442 358	23 12
Total	1.000		329

Plaintiffs' Exhibit No. 8-Continued

DDD
Per
Customer
Domestic
Per
Feet
Cubic
jo
Determination

[fol. 3695]

		4
	M.C.F. Per Customer Per Month 2.77 2.67 2.73 2.63 2.94 2.78 2.94 2.80	The customers indicated are not in each M.C.F. M.C.F.
August	Domestic Customers 139,808 169,675 187,275 186,154 204,807 195,928 193,837	ers indicated a
	Domestic Gate Sales M.C.F. 388, 025 452, 415 511, 481 516, 522 602, 622 544, 360 544, 122	The custom M.C.F. M.C.F.
	M.C.F. Per Customer Per Month 2.95 2.83 2.82 2.68 2.79 3.00	19.82 2.83 h. comparable. T 13,380,727 6,859,021 I 6,521,706 N
July	Domestic Customers 137, 275 169, 575 187, 064 196, 303 205, 624 197, 187	mer per mont
V	Domestic Gate Sales M.C.F. 405, 374 479, 371 526, 003 526, 883 573, 352 591, 294 529, 250	omestic Custo aber of domes 91 x 12
	M.C.F. Per Customer Per Month 3.28 3.03 3.13 3.14 3.14 3.20	21.95 3.13 e for June, July and August 2.91 M.C.F. per Domestic Customer per month. Above based on sales corresponding to the number of domestic customers earved.  Total Domestic Gate Sales in Texas 1933 196,421 (No. Domestic Customers—Taxes) x 2.91 x 12 6,521,706 x 1,000 = 18,63 C.F. Per Meter Per D.D.D.
June	Domestic Customers 137,621 170,724 188,453 198,394 208,228 208,228 208,228	e for June, July and August 2.91 M.C.F.  Above based on sales corresponding to the lanumber of domestic customers served.  Total Domestic Gate Sales in Texas 1933 196,421 (No. Domestic Customers—Taxe 6,521,706 x 1,000 = 18,63 C.F. Per N
	Domestic . Gate Sales M.C.F. 451,796 517,865 590,331 624,080 654,486 641,555 641,655	e for June, July and Above based on sal tal number of domes Total Domestic Gat 196,421 (No. Domes
		Total
	1927 1929 1930 1931 1932	Case

# Plaintiffs' Exhibit No. 8-Continued

[fols. 3696-3697]

## Federal Income Tax

	Twelve Months	Periods ended
	3-31-34	12-31-33
Net Profit before Federal Income Tax per Schedule of Return	\$2,812,411.58 831,946.08	\$2,817,928.77 831,946.08
	\$3,644,357.66	\$3,649,874.85
Depreciation Allowance 5% on Rate Base of \$40,256,862.39	2,012,843.12	2,012,843.12
	\$1,631,514.54	\$1,637,031.73
Interest Deduction: 86% of \$1,072,294.43. 86% of 1,091,063.20.	922,173.09	938,314.35
Net Profit for Federal Income Tax	\$709,341.45	698,717.38
Federal Income Tax @ 13.75%	\$97,534.45	96,073.64

Ехнівіт No. 9	Offered by Plaintiff-Filed July 10, 1934
[fo] 28608]	liot. eosos

	Texas Cities Gas Co.	S, T	D, P D, VP	D, VP, GC	D, VP, GM	Д	D 2
•	Municipal Gas Company	D, VP, T D, S	D	GC	D, P, GM		D.
ompanies	Lone Star Gas Company	D, S, T	D, VP, GM	D, G¢	6		
the Listed Co	Dallas Gas Company The		Q Q		D, T	Ch. Engr.	D, P, GM D, VP 5
I Positions in	County Gas Co.		A.A		D, T	Ch. Engr.	D, P, GM D, VP 5
d Their Officia	Lone Star Community Gas Natural Corp. Gas Co.	D, P, GM	D, T	25	D, VP,	Asst. Mgr.	20
Directors an	Lone Star Gas Corp.	S, T	D, VP.	D, VP, GC	Abstract Contract		-
Chart Showing Directors and Their Official Positions in the Listed Companies				<b>m</b>			Moright, E. F. Soper, R. G. Wright, W. F. Number of Directors in Companies (Total)
		Chase, Frank L	Cornatzer, H. G. Crawford, R. A.	Gregory, Thomas I Griffith, Karl F. Harding, R. E.	Hulcy, D. A. Keith, Ben E. Kizer, C. C. McCabe, J. B.	Redding, R. M.	Schmidt, E. F Soper, R. G. Wright, W. F Number of Director

p.—Director S—Secretary GC—General Counsel Ch. Engr.—Chief Engineer VP—Vice President GM—General Manager

[fol. 3699] PLAINTIFFS' EXHIBIT No. 10

[fol. 3700] THE STATE OF TEXAS, County of Tarrant.

Know All Men by These Presents:

That We, I. H. Kempner, L. B. Denning, H. C. Edrington, W. P. Gage, and J. W. Ricker, do herein and hereby organize ourselves, our associates, and successors into a corporate body, under the General Laws of the State of Texas, to do a gas business, and for purposes hereinafter more fully explained.

T

The name of this corporation shall be: "Lone Star Gas Company."

II

The purpose for which this Company is organized is to "buy, sell, and furnish oil and gas for light, heat, and other purposes; to lay down, construct, maintain, and operate pipe lines, tanks, pump stations, connections, fixtures, storage houses, and such machinery apparatus, devices, and arrangements as may be necessary to operate such pipes and pipe lines between different points in this State; to own, hold, use, and occupy such lands, rights-of-way, easements, franchises, buildings, and structures as may be necessary to the purpose of this corporation."

[fol. 3701] III

The business of this Company is to be, and shall be, transacted in Fort Worth, Tarrant County, Texas, (Ft. Worth being its principal office) but it will also do business, and maintain offices, in Wise County, Montague County, and Clay County, Texas.

IV

This corporation is organized to exist for the term of Fifty Years from the date of the filing and approval of this charter.

 $\mathbf{v}$ 

The Directors of the Company for the first year shall be five (5) in number, and consist of the following named persons, To-wit:

I. H. Kempner, of Galveston, Galveston County, Texas.

H. C. Edrington, of Ft. Worth, Tarrant County, Texas.

L. B. Denning, of Wellston, State of Ohio.

W. P. Gage, of Beaumont, Jefferson County, Texas.

J. W. Ricker, of Wichita Falls, Wichita County, Texas.

### VI

The amount of the capital stock of this corporation is fixed at Two Million Five Hundred Thousand (\$2,500,000.00) Dollars, divided into shares of One Hundred (\$100.00) Dollars each, of par value; twenty-five thousand (25,000) shares being the total authorized issue of capital stock.

[fol. 3702]

VII

We, the undersigned, present this Charter and pray that the same be filed in the office of the Honorable Secretary of State of the State of Texas.

Witness our hands, this, the Third Day of June, 1909. L. B. Denning. W. P. G. ge. J. W. Ricker.

THE STATE OF TEXAS,
County of Dallas.

Before me, the undersigned authority, on this day personally appeared L. B. Denning, W. P. Gage, and J. W. Ricker, all well known to me to be the persons whose names are subscribed to the foregoing instrument, and they each acknowledged to me, that they had executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office, this, the 3rd Day

of June, 1909.

M. A. Sepley, Notary Public, Dallas County, Texas. (Seal.)

[fol. 3703] [Endorsed:] 20298. "Lone Star Gas Company." Charter. Fort Worth. Cap. Stock \$2,500,000. Filing Fee \$2540. Franchise \$875. Remarks, 25000 shares, 50 yrs., \$1,250,000 pd. in. C. 10-8. Filed in the Office of the Secretary of State this 4 day of June, 1909. W. B. Townsend, Secretary of State.

[fol. 3704] THE STATE OF TEXAS, County of Dallas.

L. B. Denning, W. P. Gage, and J. W. Ricker, all being duly sworn, depose and say, as follows, To-wit:

I

That they are each interested in the organization of the "Lone Star Gas Company", and that they are the identical persons whose names appear in the Charter of said Company as Directors along with I. H. Kempner and H. C. Edrington.

TT

Affiants further say, that all of the capital stock, to-wit: Two Million Five Hundred Thousand Dollars (\$2,500,000), as provided for in the Charter of said "Lone Star Gas Company" has been, in good faith, subscribed for, and one-half thereof has been fully paid for, as hereinafter explained.

### TIT

The names, place of residence, and Post-Office address of each subscriber for said shares of capital stock that have been paid in, and is now in the hands of the Board of Direcoors mentioned in the Charter is, as follows to-wit:

Treat & Crawford, of Pittsburgh, Pa., Amount	
paid in	\$500,000.00
H. C. Edrington, of Ft. Worth, Texas, Amount	
paid in	\$375,000.00
I. H. Kempner, of Galveston, Texas, Amount	
paid in	100,000.00
G. W. Crawford, of Pittsburgh, Pa., Amount	*
paid in	150,000.00
L. B. Denning, of Wellston, Ohio, Amount	
paid in	\$115,000.00
W. P. Gage, of Beaumont, Texas, Amount	
paid in	\$5,000.00
J. W. Ricker, of Wichita Falls, Tex., Amount	
paid in	\$5,000.00
Total Amount of capital stock paid for	

\$1,250,000.00

[fol. 3705] IV

That the subscription to said capital stock above referred to was paid in cash by I. H. Kempner, by G. W. Crawford, by L. B. Denning, by J. W. Ricker, and by W. P. Gage.

V

That the subscription of Treat & Crawford, of Five hundred Thousand (\$500,000.00) Dollars was paid in to the Company, as follows:

By them executing a good and sufficient Deed of Conveyance, transferring the natural gas, and the natural gas rights to about Forty One Thousand (41,000) acres of land located in Clay and Archer Counties, Texas, and a considerable part thereof located near Petrolia, or in the proven gas field of Clay County, Texas; that said property so conveyed by Treat & Crawford is of the actual value to the Company at which it was taken; that is, affiants say, that each and all of them are familiar with the property transferred to the Company by Treat & Crawford, the same above described, and that the cash value of such property is, in the opinion and to the best of the knowledge and belief of each, and all the affiants, Five Hundred Thousand (\$500,000.00) Dollars, and is of the kind and character. of property that will be needed and can be profitably used and handled by the Company.

### VI

Affiants further show, that the subscription of H. C. Edrington to the capital stock of the "Lone Star Gas Company", to the amount of Three Hundred and Seventy-five Thousand (\$375,000.00) Dollars was paid for by him executing a Conveyance to two (2) large, valuable, natural gas wells and part interest in three others located near Petrolia, in Clay County, Texas, and the natural gas right to a large acreage of land tributary thereto, and to the pipe lines conveying said natural gas from the wells in the [fol. 3706] field to the town of Petrolia; and then to the pipe line and all appurtenances, Right-of-way, etc., extending from the gas field to the town of Wichita Falls; and also the Right of Way giving the right to lay gas pipes and

erect thereon telegraph and telephone lines, and at all times, have ingress and egress thereto on a line extending from the gas field through Clay County, Montague County, Wise County, and Tarrant County, into the City of Ft. Worth, and which property so conveyed by said H. C. Edrington for said capital stock is, to the best of the knowledge and belief of affiants, of the cash value to the Company of the amount at which it was taken, as above explained.

### VII

The capital stock of the "Lone Star Gas Company", to the extent of One Million Two Hundred and Fifty Thousand (\$1,250,000.00) Dollars that has not yet been paid for, has been subscribed for by the following persons:

Treat & Crawford, of Pittsburgh, Pa., for	\$650,000.00
H. C. Edrington, of Ft. Worth, Texas, for	\$350,000.00
L. B. Denning, of Wellston, Ohio, for	\$100,000.00
J. W. Ricker, of Wichita Falls, Tex., for	\$75,000.00
W. P. Gage, of Beaumont, Texas, for	\$75,000.00

Total Stock subscribed but not paid for \$1,250,000.00

Witness our hands, this the 3rd day of June, 1909.

L. B. Denning. W. P. Gage. J. W. Ricker.

Sworn to and Subscribed before me by L. B. Denning, W. P. Gage, and J. W. Ricker, on this, the 3rd day of June, 1909. M. A. Sipley, Notary Public, Dallas Co., Tex. (Seal.)

[fols. 3707-3708] STATE OF TEXAS, County of Travis.

L. B. Denning, being duly sworn, deposes and says, as follows, to wit:

That he is interested in the organization of the "Lone Star Gas Company", and that he is the same person whose name appears in the charter of said Company as a director along with I. H. Kempner, H. C. Edrington, W. P. Gage, and J. W. Ricker;

That he is, and has been for more than seven years, acquainted with, and a business representative of, Treat

& Crawford, of Pittsburg, Pa., who are the same persons whose names appear as subscribers for the capital stock

of said Gas Company;

That said firm of Treat & Crawford is a partnership consisting of Milo C. Treat, whose place of residence is in the City of Washington, State of Pennsylvania, and George W. Crawford, whose place of residence is in the City of Pittsburg, State of Pennsylvania;

That the office and place of business of said Treat & Crawford is located at 2017, Farmers Bank Building, in

the City of Pittsburg, State of Pennsylvania;

That the interest of said Milo C. Treat and George W. Crawford in the capital stock subscribed for and paid in by them is as follows:

To Milo C. Treat, the undivided one-half interest of \$500,000, or \$250,000.

To Geo. W. Crawford, the undivided one-half interest of

\$500,000, or \$250,000.

That the interest of the said Milo C. Treat and George W. Crawford in the capital stock of said Company subscribed but not yet paid for, is as follows:

To Milo C. Treat, the undivided one-half interest of \$650,000, or \$325,000.

To Geo. W. Crawford, the undivided one-half interest in

\$650,000, or \$325,000.

Witness my hand, this the 4th day of June, A. D. 1909. L. B. Denning.

Sworn to and subscribed before me by L. B. Denning on this the 4th day of June, 1909. Fred C. Wolfe, N. P. Notary Public Travis County, Texas. (Seal.)

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[fols. 3710-3712] DEFENDANT'S EXHIBIT No. 1

[fol. 3713] IN THE DISTRICT COURT OF THE UNITED STATES FOR THE WESTERN DISTRICT OF TEXAS, AUSTIN DIVISION

In Equity. No. 467

LONE STAR GAS COMPANY, Plaintiff,

VS

THE RAILROAD COMMISSION OF TEXAS, LON A. SMITH, C. V. Terrell and E. O. Thompson, Said Persons Being the Members of and Constituting the Railroad Commission of Texas; James V. Allred, Attorney General of the State of Texas; Community Natural Gas Company, Municipal Gas Company, Texas Cities Gas Company, County Gas Company, the Dallas Gas Company, Waxahachie Gas Company, and Gainesville Gas and Electric Company, Corporations, Defendants

### BILL OF COMPLAINT

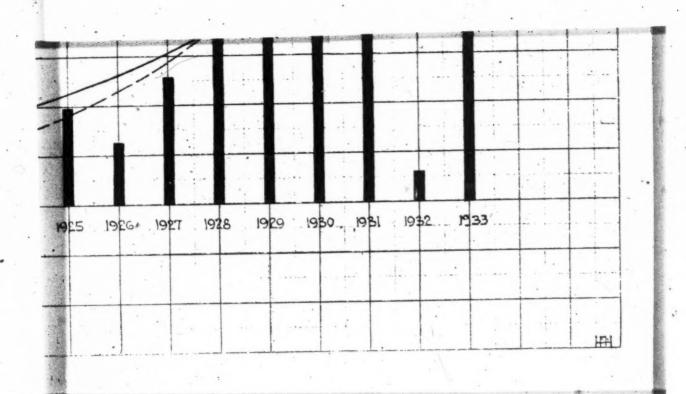
To the Judges of the District Court of the United States for the Western District of Texas:

Lone Star Gas Company, Plaintiff, brings this its Bill of Complaint, against the following Defendants: The [fol. 3714] Railroad Commission of Texas, Lon A. Smith, C. V. Terrell and E. O. Thompson, said persons being the members of and constituting the Railroad Commission of Texas; James V. Allred, Attorney General of the State of Texas; Community Natural Gas Company, Municipal Gas Company, Texas Cities Gas Company, County Gas Company, the Dallas Gas Company, Waxahachie Gas Company, and Gainesville Gas and Electric Company.

For cause of action the Plaintiff alleges:

T

Plaintiff Lone Star Gas Company is a corporation, duly incorporated, created and existing under and pursuant to the laws of the State of Texas, having its principal office and domicile in the City of Dallas, County of Dallas, State of Texas, and in the Northern District of Texas, Dallas Division; and is a corporate citizen, resident and inhabitant



of the State of Texas and of the United States and of the Northern District of Texas.

### II

The Defendants Lon A. Smith, C. V. Terrell and W. O. Thompson are each duly elected members of and are the persons constituting the Railroad Commission of Texas. The Railroad Commission of Texas is an administrative or legislative board or commission of the State of Texas and has certain powers relating to the regulation of the [fol, 3715] rates of public utilities engaged in the natural gas business, said powers and duties being defined by Articles 6050 to 6066 of the Revised Civil Statutes of Texas, 1925. These said Defendants, purporting to act under the power and authority conferred upon them by law, have entered the Order herein complained of.

The Defendant James V. Allred is the duly elected, qualified and acting Attorney General of the State of Texas and is charged with the general power and duty of carrying out and enforcing the laws of said State, and the orders and acts of the Railroad Commission of Texas, and par-

ticularly the Order herein complained of.

All of the foregoing Defendants are citizens, inhabitants and residents of the State of Texas and of the United States and, so the Plaintiff is informed and believes, of the Western District of Texas.

### III

- (a) The Defendant Community Natural Gas Company is a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, with its principal office at 100 West 10th Street in the City of Wilmington, New Castle County, Delaware. During all of the times herein alleged the said Defendant has continuously been qualified, and is now duly qualified, to do and conduct its corporate business in the State of Texas under a permit duly issued to it by the Secretary of State of the State of Texas. Said Defendant has and maintains an office in the [fol. 3716] City of Dallas, Dallas County, Texas, and in the Northern District of Texas.
- (b) The Defendant Municipal Gas Company is a corporation duly organized and existing under and by virtue of the laws of the State of Texas, with its principal office

and domicile in the City of Dallas, Dallas County, Texas, and is a corporate citizen, inhabitant and resident of the State of Texas and of the United States and of the Northern District of Texas.

- (c) The Defendant Texas Cities Gas Company is a corporation duly organized and existing under and by virtue of the laws of the State of Texas, with its principal office and domicile in the City of Dallas, Dallas County, Texas, and is a corporate citizen, inhabitant and resident of the State of Texas and of the United States and of the Northern District of Texas.
- (d) The Defendant County Gas Company is a corporation duly organized and existing under and by virtue of the laws of the State of Texas, with its principal office and domicile in the City of Dallas, Dallas County, Texas, and is a corporate citizen, resident and inhabitant of the State of Texas and of the United States and of the Northern District of Texas.
- (e) The Defendant The Dallas Gas Company is a corporation duly organized and existing under and by virtue of the laws of the State of Texas, with its principal office and domicile in the City of Dallas, Dallas County, Texas, and [fol. 3717] is a corporate citizen, resident and inhabitant of the State of Texas and of the United States and of the Northern District of Texas.
- (f) The Defendant Waxahachie Gas Company is a corporation organized and existing under and by virtue of the laws of the State of Arizona but has a principal office in the City of Waxahachie, Ellis County, Texas. During all of the times herein alleged the said Defendant has continuously been qualified, and is now duly qualified, to do and conduct its corporate business in the State of Texas under a permit duly issued to it by the Secretary of the State of the State of Texas. Said Defendant has and maintains an office in the City of Waxahachie, Ellis County, Texas, and in the Northern District of Texas.
- (g) The Defendant Gainesville Gas and Electric Company is a corporation duly organized and existing under and by virtue of the laws of the State of Texas, with its principal office and domicile in the City of Gainesville, Cooke

County, Texas, and is a corporate citizen, resident and inhabitant of the State of Texas and of the United States and of the Eastern District of Texas.

### IV

This suit is of a civil nature in equity and is brought for the purpose of restraining and enjoining the enforcement and execution of a certain Order entered by The Railroad Commission of Texas, signed by the persons constituting the said Commission, in Gas Utilities Docket No. 75, dated [fol. 3718] September 13, 1933, finding, among other things, that the price of forty cents (40¢) per one thousand (1,000) cubic feet charged by the Plaintiff for domestic gas transported, sold and delivered by it in interstate and intrastate commerce to the corporate Defendants at the city gates of approximately two hundred fifty (250) towns and cities. located within the State of Texas, is unreasonable and excessive to the extent of eight cents (8¢) per one thousand (1,000) cubic feet; that thirty-two cents (32¢) per one thousand (1,000) cubic feet is a reasonable price to be charged and collected for said gas; and ordering and commanding Plaintiff, hereafter, to charge and receive for such gas from the corporate Defendants herein a rate not to exceed thirtytwo cents (32¢) per one thousand (1,000) cubic feet. A true and correct copy of said Order, together with the accompanying Opinion of The Railroad Commission, is hereto attached, marked "Exhibit A" for identification, and by such reference incorporated herein and made a part hereof.

This suit is also brought for the purpose of restraining and enjoining the Defendants Community Natural Gas Company, Municipal Gas Company, Texas Cities Gas Company, County Gas Company, the Dallas Gas Company, Waxahachie Gas Company and Gainesville Gas and Electric Company and each of them, who are the distributing companies having contracts with Plaintiff which will be affected by the aforesaid Order, from failing or refusing to carry out their respective contracts with the Plaintiff for the sale by [fol. 3719] Plaintiff and purchase by the said several corporate Defendants of natural gas for domestic purposes at the city gates of approximately two hundred fifty (250) towns and cities wherein the said corporate Defendants own and operate natural gas distribution plants; and which said contracts provide a rate, price or charge of forty cents (40¢)

er one thousand (1,000) cubic feet and which said price or harge the said corporate Defendants have for many years een paying, and are now paying to the Plaintiff for domesc natural gas, as more particularly stated hereinafter.

This suit presents a substantial Federal question and ontroversy arising under the Constitution and laws of the nited States in that, as Plaintiff avers, the rate or price nat the said Order of The Railroad Commission of Texas equires the Plaintiff to charge the corporate Defendants or natural gas is confiscatory of Plaintiff's property used r useful in the public service and in furnishing natural gas the said corporate Defendants; and the promulgation and nforcement of the said Order necessarily does and will derive Plaintiff of its property, devoted to public service and sed and useful therein, without due process of law, denies Plaintiff the equal protection of law, denies to Plainff freedom of contract and impairs the obligation of conact, and directly and substantially interferes with the busiess of Plaintiff and its right to engage in interstate comerce free from such direct and substantial interference, l in violation of its rights under the Constitution of the nited States, and specifically in violation and contravenol. 3720] tion of the Fourteenth Amendment, Section 10 Article 1 and Section 8 of Article 1 of the Constitution of e United States, as is hereinafter more fully set forth. herefore said Order of The Railroad Commission of Texas null and void.

The amount in controversy in this suit exceeds the sum or alue of Three Thousand & 00/100 (\$3,000.00) Dollars, exasive of interest and costs.

### V

For more than fifteen (15) years prior to the filing of this it the Plaintiff has owned and operated a system of pipe less and appurtenant equipment located in the States of klahoma and Texas, and during all of that time has been gaged in the production, purchase, transportation and le of natural gas in interstate commerce in said States as a ntinuous and established business. From time to time and ter since its incorporation on June 4, 1909, and down to be time of the filing of this suit, additional supplies of gas ing necessary for the conduct of the Plaintiff's business, aintiff has caused to be purchased in the States of Texas

and Oklahoma gas leases and gas rights and has caused to be constructed at great expense numerous pipe lines connecting its source of gas supply in the States of Texas and Oklahoma with the markets which it serves in interstate commerce in the States of Texas and Oklahoma.

Plaintiff is engaged in the purchase, production, transportation and sale of natural gas from approximately four thousand (4,000) miles of integrated pipe line system in [fol. 3721] Texas and Oklahoma to natural gas distributing companies doing business in the two said States, including the corporate Defendants herein, and which said natural gas distributing companies serve more than two hundred thousand (200,000) customers in the State of Texas, representing a population of more than one million people. Plaintiff supplies natural gas at wholesale and for domestic purposes to the said distributing companies at the city gates of more than two hundred seventy-five (275) towns, cities and communities in the States of Oklahoma and Texas, at a uniform price of forty cents (40¢) per one thousand (1,000) cubic feet, with negligible exceptions necessitated by long term contracts. The said city gate price of forty cents (40¢) per one thousand (1,000) cubic feet has been established by written contracts between Plaintiff and the various natural gas distributing companies, including the corporate Defendants herein, and said contracts, all of which are now and were at the time of the entry of the Order by the Railroad Commission in full force and effect, and said uniform price have prevailed for a period of many years preceding the filing of this suit. By virtue of its said contracts with the several distributing companies who are corporate Defendants herein, the Plaintiff has been engaged continuously, and is now engaged in transporting, selling at wholesale and delivering through its pipe lines in interstate commerce natural gas for domestic purposes in substantial amounts at the city gates of the following towns and cities in the State of Texas, to-wit: Dallas, Gainesville, Sherman, Wichita Falls, Denison, Denton, McKinney, Vernon, Bon-[fol. 3722] ham, and many others. The gas so delivered by Plaintiff at the city gates of said towns and cities has been and is now being transported uninterruptedly through Plaintiff's high pressure pipe lines extending from the State of Oklahoma into the State of Texas.

That on or about the 14th day of October, 1932, The Railroad Commission of Texas ordered an investigation of the reasonableness of the rates and charges of the Lone Star Gas Company for natural gas sold and delivered at the city gates of the several towns and cities in the State of Texas where Plaintiff was selling gas at wholesale, and set said cause or investigation for a hearing on November 1, 1932. Said cause was and is known as Gas Utilities Docket No. 75, before The Railroad Commission of Texas.

The hearings in said investigation before the said Commission were held from time to time, and evidence and exhibits were introduced to show that the contracts between the Plaintiff and the corporate Defendants herein, and under which contracts the Plaintiff sells natural gas to the corporate Defendants at the city gate, were reasonable and were contracts such as would be made by persons dealing at arm's length; that the rate or price of forty cents (40¢) per one thousand (1,000) cubic feet, which the Plaintiff charges to the corporate Defendants herein for natural gas delivered for domestic purposes at the city gates of the towns and cities served in the State of Texas by the Plaintiff's. pipe line system, was fair and reasonable; that the fair [fol. 3723] value of the property of the Plaintiff used or useful in the business of supplying natural gas to the corporate Defendants herein and all other natural gas distributing companies receiving gas at the city gate from the Plaintiff was more than Seventy Million (\$70,000,000.00) Dollars: that a fair minimum allowance for depreciation, depletion and amortization reserve charge was more than Three Million, Four Hundred Thousand & 00/100 (\$3,400,000.00) Dollars per annum; that the fair and reasonable annual net return which the Plaintiff should be permitted to earn under rates imposed upon it by public authority was not less than ten per cent (10%) of the present fair value of its said properties used and useful in the public service after deducting operating expenses of every kind and character, including a proper allowance for depreciation, depletion and other reserves.

### VII

That on or about the 13th day of September, 1933, The Railroad Commission of Texas handed down an Order, ac-

companied by an Opinion, in Gas Utilities Docket No. 75 before The Railroad Commission of Texas, heretofore identified as "Exhibit A" and made a part of this Bill of Complaint; that in this Order, together with the accompanying Opinion, The Railroad Commission of Texas purported to find that the price of forty cents (40¢) per one thousand (1,000) cubic feet for domestic gas sold by the Plaintiff to the corporate Defendants herein was excessive and unreasonable; that said charge was excessive in the amount of [fol. 3724] eight cents (8¢) per one thousand (1.000) cubic feet; that thirty-two cents (32¢) is a reasonable price for Plaintiff to receive for such gas; and said Order, in effect, commanded and decreed that the Plaintiff Lone Star Gas Company should thereafter ignore its contracts with the corporate Defendants herein and make no charge to them and receive no payments from them for domestic gas transported and delivered by it at a rate price or charge in excess of thirty-two cents (32¢) per one thousand (1,000) cubic feet.

Plaintiff shows that The Railroad Commission of Texas is the final legislative and administrative Board or Commission to which Plaintiff may appeal, and no other legislative or administrative board, commission, body or agency of the State of Texas is authorized to supersede the rate, price or charge of the Plaintiff as fixed by The Railroad Commission of Texas, and to establish fair, reasonable and compensatory rates in lieu thereof. Therefore, the legislative remedy of this Plaintiff to prevent the confiscation of its property under the said Order, "Exhibit A" hereto, has been exhausted.

Plaintiff therefore shows that it has no plain, adequate and complete remedy at law.

### VIII

Plaintiff shows that the Opinion and Order of The Railroad Commission of Texas, said Opinion and Order being "Exhibit A" hereto, found a reproduction cost, new, as of December 31, 1931, for Transmission and Production prop-[fol. 3725] erties, exclusive of Leaseholds, of Forty-four Million, Six Hundred Six Thousand, Three Hundred Thirty-seven & 16/100 (\$44,606,337.16) Dollars; a fair value of Leaseholds as of December 31, 1931, of One Million, Nine Hundred Ninety-one Thousand, Six Hundred Thirteen

& 92/100 (\$1,991,613.92) Dollars, and a "rate base" of Forty-six Million, Two Hundred Forty-six Thousand, Six Hundred Seventeen & 53/100 (\$46,246,617.53) Dollars to cover Plaintiff's public service property used and useful in connection with its business of purchasing, transporting, selling and delivering natural gas in interstate and intrastate commerce. Said rate base so found by The Railroad Commission of Texas was at least Twenty-three Million & 00/100 (\$23,000,000.00) Dollars lower than the fair and reasonable value of said property as of December 31, 1931, January 1, 1933, and now, and the method adopted, and the results reached by The Railroad Commission of Texas was erroneous and contrary to the well established rules of law in that, among other things:

- (a) The said Commission completely disregarded and ignored, not only the actual cost of Plaintiff's public service property as reflected by its books, in the approximate amount of Fifty Million (\$50,000,000.00) Dollars, which, in view of recent increases in the cost of steel pipe, and the upward trend of prices generally and particularly applicable to materials going into and comprising Plaintiff's public service property, fairly represented a minimum value of the property and elements of value included therein;
- [fol. 3726] (b) The said Commission grossly underestimated the true present reproduction cost of the public service property of the Plaintiff and the items of property which the Commission included in its reproduction cost estimate, in that, among other things, it entirely disregarded and ignored substantial increases in the cost of steel pipe comprising by far the greater part of the value of the physical property included in the Commission's estimate;
- (c) The said Commission, as is disclosed by its Order and Opinion, "Exhibit A," arbitrarily and capriciously eliminated from its so-called determination of a rate base numerous items of physical property which were and are both used and useful by the Plaintiff in its public service business, some of the items so eliminated by the Commission being gas wells and gas leaseholds, and other property owned by the Plaintiff and located in what is known as the Petrolia Field, and actually used and useful in the best judgment of the management of the Plaintiff in connection with Plaintiff's public service business, the actual cost of said properties in

the aggregate amounting to Six Hundred Eighty-seven Thousand, Seven Hundred Eighty-one & 13/100 (\$687,781.13) Dollars; and furthermore the said Commission arbitrarily and capriciously eliminated from its so-called rate base, and contrary to the undisputed testimony in said investigation, net capital additions to the public service property of Plaintiff in the calendar year of 1932, which net capital additions had an actual cost to Plaintiff of Two Million, Two Hundred Fifty-seven Thousand, Six Hundred Eighty-two & 07/100 Dollars (\$2,257,682.07);

- [fol. 3727] (d) The said Commission wholly failed and refused to include in its so-called "rate base," as reflected by the Order and Opinion, "Exhibit A" hereto, any amount to cover that element of value actually present in and constituting a part of Plaintiff's public service property, known and referred to as "going value" or "going concern value" or value resulting from the business which the Plaintiff has developed and which it now has;
- (e) The said Commission, as disclosed by the Order and Opinion, "Exhibit A" hereto, in stating the net income of the Plaintiff which would be available for return under the present city gate rate of forty cents (40¢) per one thousand (1,000) cubic feet, and under the thirty-two cent city gate rate made mandatory by the aforesaid Order, improperly computed the net income of the Plaintiff from its public service property for the calendar year of 1931, improperly and arbitrarily disallowed necessary operating expenses actually incurred in the amount of Two Hundred Seventeen Thousand, Eight Hundred Eighty-four & 05/100 (\$217,-884.05) Dollars for the calendar year of 1931, and also wholly and improperly disregarded as an operating expense the Federal income taxes which were payable for said year. In this connection, Plaintiff would show that all of the operating expenses incurred by the Plaintiff and reflected by its books for the calendar year of 1931, and all other periods herein, were incurred in the exercise of good faith and reflected the best judgment of the management of the Plaintiff.
- (f) The Railroad Commission of Texas, in the Order and [fol. 3728] Opinion, "Exhibit A" hereto, in computing the amount available to Plaintiff for return on its public service property, allowed only the grossly inadequate sum of Nine

Hundred Sixty-eight Thousand, Sixty-six & 98/100 (\$968,066.98) Dollars, or less than two per cent (2%) of the actual cash cost of the Plaintiff's public service property, as an annual depreciation charge; whereas, there was no competent testimony of any kind or character introduced in said investigation before The Railroad Commission of Texas upon which such a determination could have been made.

- (g) Said Order, "Exhibit A" hereto, does not and will not in the future permit a fair return to the Plaintiff upon its property used and useful in the public service and in the suppyling of natural gas service to the corporate Defendants herein and to other natural gas distributing plants receiving their natural gas, supply wholesale at the city gate from this Said Order, together with the accompanying Opinion upon which said Order purports to be based, does, in fact, and its effect will be (1) to restrict the "rate base" to approximately sixty-six per cent (66%) of the true value of the Plaintiff's said property; (2) to exaggerate the net earnings of the Plaintiff and to make said net earnings appear to be in excess of Plaintiff's true net earnings; and (3) to restrict the return yielded by such fictitious net earnings upon said insufficient and improper rate base to the wholly inadequate and confiscatory rate of six per cent (6%) per annum, as stated in "Exhibit A" hereto. In this connection, [fol. 3729] Plaintiff shows that the minimum return which. has been generally allowed in this territory to other public utilities of a less hazardous nature is eight per cent (8%) per annum.
- (h) The aforesaid Order of The Railroad Commission of Texas, in determining the gross and net revenues of the Plaintiff for the purpose of calculating the rates for domestic gas to be charged at the city gate by the Plaintiff, has erroneously and improperly disregarded the decline in gross and net revenues of the Plaintiff for the calendar years of 1931 and 1932, and for the twelve months ended April 30, 1933, in spite of the fact that the volume of business of the Plaintiff and the trend of its annual earnings have been continuously downward since the year 1929, and all of which was made manifest in the investigation by the said Commission.

Specifically, the Plaintiff would show that if the said Order, "Exhibit A" hereto, had been effective continuously

during the year of 1932 on all of its sales of domestic gas at the city gates of the towns and cities supplied by its integrated pipe line system in the States of Oklahoma and Texas, then (1) using the actual public service revenues and operating expenses of the Plaintiff for the calendar year of 1932, and (2) using the rate base of Forty-six Million, Two Hundred Forty-six Thousand, Six Hundred Seventeen & 53/100 (\$46,246,617.53) Dollars, and (3) using the depreciation allowance of Nine Hundred Sixty-eight Thousand, Sixty-six & 98/100 (\$968,066.98) Dollars, as allowed by the Opinion and Order, "Exhibit A" hereto, the net amount [fol. 3730] available for return to Plaintiff would have been only Two Million, Four Hundred Eighty-four Thousand, Five Hundred Twelve & 41/100 (2,484,512.41) Dollars, or only five and thirty-seven one-hundred-s (5.37%) per cent upon said rate base or property value and, similarly, the net amount available for return for the twe've months ended June 30, 1933, would have been Two Million, Three Hundred Sixty-two Thousand, Eight Hundred Seventy-two & 09/100 (\$2,362,872.09) Dollars, or only five and eleven onehundredths (5.11%) per cent upon said rate base or property value, whereas by the said Order and Opinion. "Exhibit A" hereto, it was determined that six per cent (6%) per annum was the minimum annual net return which Plaintiff was entitled to receive.

### IX

The public service business of the Plaintiff has been conducted efficiently and economically during all of the times herein referred to, and is now being so conducted. In truth and in fact the operating expenses of the Plaintiff for the past three (3) years have been unusually low and will tend to materially increase in the future. Plaintiff shows that it has subscribed to and complied with the employment agreement of the President of the United States, as modified for the natural gas industry, all as pursuant to the National Industrial Recovery Act, and that the effect thereof, due to the shortening of labor hours and increases in wages and salaries, will be to add not less than Two Hundred and Fifty Thousand Dolars (\$250,000.00) per annum to the inescapa-[fol. 3731] ble operating expenses in connection with the public service business of the Plaintiff.

Plaintiff shows that the present fair value of its property used and useful in the business of supplying natural gas to the corporate Defendants herein, and all other natural gas distributing companies receiving gas at the city gate from the Plaintiff, was at the time of the hearing before The Railroad Commission, and is now, more than Seventy Million Dollars (\$70,000,000.00); that a sum not less than Three Million, Four Hundred Thousand (\$3,400,000.00) Dollars is a fair minimum annual allowance for a depreciation, depletion and amortization reserve charge; that a fair and reasonable annual net return which it should be permitted to earn, considering the hazards of the natural gas business, the rate of return of other utilities of a less hazardous nature, the return necessary to attract a free flow of capital for investment in the enterprise and to insure the financial soundness of the Plaintiff, is not less than ten per cent (10%) of the present fair value of its public service properties afterdeducting operating expenses and an annual allowance for depreciation, depletion and other proper reserves,

Plaintiff further shows that the net amount available for depreciation, depletion, amortization, Federal income tax and return on said value of its public service properties for the year ended December 31, 1931, at the prevailing rate of forty cents (40¢) per one thousand (1,000) cubic feet for domestic gas was only Four Million, Nine Hundred Eight [fol. 3732] Thousand, Twenty-four & 24/100 (\$4,908,024.24) Dollars, or approximately seven per cent (7%) on said rate base; and that deducting Federal income taxes and the sum of Three Million, Four Hundred Thousand & 00/100 (\$3,400,000.00) Dollars as the fair and reasonable allowance for depreciation, depletion and amortization for the year ending December 31, 1931, leaves for net return less than two per cent (2%) on said rate base or fair value.

### XI

Plaintiff would show that it has devoted and dedicated to, and used and useful in the business of supplying natural gas and natural gas service to the towns and cities in the States of Oklahoma and Texas, which towns and cities it supplies with natural gas at the city gates, properties of the actual cash cost, as reflected by its books on December 31, 1932, of Fifty Million, Thirty-four Thousand, Four Hundred

Thirty-one & 70/100 (\$50,034,431.70) Dollars, and that the cost of its public service property as reflected by its books is less than the true value thereof for the reason that in the twenty-four (24) years of its corporate existence it has not been its general policy to capitalize engineering and supervisory costs, administrative and legal expenses and taxes and interest during construction. The said cost of Fifty Million, Thirty-four Thousand, Four Hundred Thirty-one & 70/100 (\$50,034,431.70) Dollars, which the books of the Plaintiff reflect as the cost of its public service properties on December 31, 1932, does not include materials and supplies on hand and used and useful in the public service business of the Plaintiff, nor does it include cash working capi-[fol. 3733] tal requirements of the Plaintiff necessary in the conduct of its public service business. In this connection, Plaintiff would show that for the year ended ecember 31, 1932, the net amount available for depreciation, depletion, amortization and return on its public service properties was Four Million, Six Hundred Fifty-eight Thousand, Five Hundred Six & 46/100 (\$4,658,506.46) Dollars, or only nine and thirty-one-one-hundredths (9.31%) per cent of the actual cost of the properties reflected by the books of the Plaintiff on December 31, 1932.

Also, Plaintiff would show that the actual cost to the Plaintiff of its public service properties as reflected by its books on June 30, 1933, was Forty-nine Million, Nine Hundred Twenty-three Thousand, One Hundred Thirty-seven & 26/100 (\$49,923,137.26) Dollars, and that for the twelve (12) months ended June 30, 1933, the net amount available for depreciation, depletion, amortization and return on said public service property was Four Million, Four Hundred Ninety-one Thousand, Eight Hundred Twenty-five & 60/100 (\$4,491,825.60) Dollars, or only eight and ninety-nine-one-hundredths (8.99%) per cent of the said book cost.

### XII

That the enforcement of said Order, "Exhibit A" hereto, will, as heretofore shown, operate to confiscate the public service property and business of the Plaintiff and that under the terms and provisions of said Order, Plaintiff is being and will be subjected to a cash loss of approximately Four [fol. 3734] Thousand & 00/100 (\$4,000.00) Dollars per day, and that such loss will continue until the equitable relief herein prayed for is granted.

The Statutes of Texas provide that any person or concern failing to comply with any valid order of the Commission, when not stayed or suspended by court order, shall be subject to penalties payable to the State of Texas of not less than One Hundred Dollars (\$100.00) nor more than One Thousand (\$1,000.00) Dollars for each offense, each violation and each day such failure to comply continues to constitute a separate offense. Such Statutes likewise provide a fine of not less than Fifty (\$50.00) Dollars nor more than One Thousand (\$1,000.00) Dollars, and, in addition, imprisonment for not less than ten (10) days nor more than six (6) months, to be imposed on the owner, officer, director, agent or employee of any corporation owning and operating gas pipe lines willfully violating the Statutes governing gas companies doing business in Texas.

In this connection, Plaintiff alleges that unless the Defendants, The Raiload Commission of Texas and the individual members constituting the said Commission, and the Attorney General of the State of Texas, are restrained and enjoined as herein prayed, they will, as Plaintiff believes and so alleges, attempt to compel Plaintiff to supply domestic gas to the Defendant distributing companies at the confiscatory rate prescribed by the Order of the said Railroad Commission of Texas, and, in the event of Plaintiff's failure so to do, will attempt to enforce the penalties prescribed by the Statutes of the State of Texas, and Plain-[fol. 3735] tiff, its directors, officers, agents, servants and employees will be deterred and prevented by the threat of said penalties from charging the presently prevailing rate of forty cents (40¢) per one thousand (1,000) cubic feet for domestic gas and from charging any rate other than that prescribed by the Order of The Railroad Commission, and, thereby, Plaintiff will be forced to submit to the confiscation of its property without due process of law, and in violation of its rights under the Constitution of the United States. as hereinbefore alleged, and will be subjected to great and irreparable loss, damage and injury.

### XIII

That the said Order is unconstitutional, null and void, and is in excess of the authority conferred by law upon The Railroad Commission of the State of Texas, in that:

(a) The said Railroad Commission and the Defendant members thereof, in the investigation of the contracts between Plaintiff and the Defendant distributing companies for the supply of gas at the city gates of the respective communities served by the Defendant distributing companies and the reasonableness of the price or rate charged by Plaintiff under the aforesaid contracts, approached all questions involving the same as if it had power and jurisdiction under the law to fix the rates and commodity charges of the Plaintiff, and has, in effect, undertaken to fix the rates and commodity charges of the Plaintiff in relation to its interstate business, and the effect of the said [fol. 3736] Opinion and Order and the enforcement thereof by the said Railroad Commission is and will be to usurp the power to regulate and burden interstate commerce, and thereby the said Commission has acted wholly without constitutional or lawful authority, power or jurisdiction;

(b) The Railroad Commission of Texas is a creature of the Legislature of the State of Texas, deriving its powers from the Statutes of the State of Texas, which, likewise, limit the exercise of the same; that such right, power and authority as is given to The Railroad Commission of Texas by Statute to investigate the reasonableness of the rate charged by Plaintiff for the sale and delivery of domestic. gas, at wholesale at the city gates, to the distributing companies named as Defendants herein is conferred by the provisions of Article 6053, Revised Statutes of Texas, 1925; that if the aforesaid Article purports and was intended to confer upon The Railroad Commission of Texas the power and authority to fix, establish and enforce the adequate and reasonable price of natural gas, and reasonable rates and. charges for transporting, producing, distributing, buying, selling and delivering gas moving uninterruptedly in high pressure pipe lines running from outside the State of Texas into the State of Texas, and constituting and being a part of interstate transportation and interstate commerce, then the said Statute under which The Railroad Commission of Texas purported to act in entering the Order, "Exhibit A" hereto, herein attacked, is void as being in contravention of the commerce clause of the Constitution of the United [fol. 3737] States. That if the said Statute should be construed as not conferring, or having been intended to confer upon The Railroad Commission of Texas the power of fixing and establishing rates and prices for natural gas moving continuously from outside the State of Texas into the

State of Texas in high pressure pipe lines, such movement, transportation and sale being a part of interstate commerce, then The Railroad Commission of Texas, in entering the Order which it has entered in this case has exceeded the power and authority conferred upon it by law, and has usurped a power not conferred upon it by law, for which reason the Order herein attacked is unconstitutional, null and void.

- (c) A substantial portion of the natural gas purchased by the Defendant distributing companies respectively at the respective city gates of the various communities served by them is natural gas transported by Plaintiff in interstate commerce, national in its character, and Plaintiff is lawfully entitled to sell said gas to the several Defendant distributing companies herein and to other purchasers in the State- of Texas and Oklahoma without interference by The Railroad Commission of Texas; and the Opinion and Order of The Railroad Commission of Texas, "Exhibit A" attached hereto, unlawfully deprives the Plaintiff of the benefits and advantages of its ownership of said gas and said pipe line system and the fruits of its said interstate transportation, and unlawfully denies to Plaintiff the free right to sell from its said transportation system its natural [fol. 3738] gas so continuously transported in interstate commerce and unlawfully deprives Plaintiff of the rights guaranteed it by Article 1, Section 8, Clause 3 of the Constitution of the United States, and imposes upon Plaintiff an unreasonable regulation, and places an undue and direct burden upon, and constitutes a direct interference with interstate commerce.
- (d) The said Opinion and Order, "Exhibit A" hereto, violates Article 1, Section 10, Subdivision 1 of the Constitution of the United States in that they, and each of them, impair the obligation of the contracts between Plaintiff and the several Defendant distributing companies, under which each of the said Defendant distributing companies purchases gas from the Plaintiff.
- (e) The said Opinion and Order, "Exhibit A" hereto, are in violation of the Fourteenth Amendment to the Constitution of the United States, in that they deprive the Plaintiff of its property without due process of law, de-

stroys its freedom of contract, and deny to it the equal protection of the laws.

- (f) The said Order of The Railroad Commission of Texas requiring Plaintiff to charge and collect for domestic gas delivered by it to the various distributing companies thirtytwo cents (32¢) per one thousand (1,000) cubic feet, and denying to it the right to charge an amount in excess thereof, fixes a rate, charge and price that would not produce a reasonable return on the present fair value of the public service properties of the Plaintiff, used and useful [fol. 3739] in furnishing its interstate as well as intrastate gas service to Defendant distributing companies and others, and if the Plaintiff were required to deliver gas to the said distributing companies at the rate of thirty-two cents (32¢) per one thousand (1,000) cubic feet, as prescribed by The Railroad Commission, the result would be that the Plaintiff's public service properties would be confiscated, and it would be deprived of its properties without due process of law, all in violation of the Fourteenth Amendment to the Constitution of the United States.
- (g) The Plaintiff, in the sale of the natural gas transported by it in interstate commerce, is limited to the markets connected with its transportation system as now located, and if the said Orders of the Railroad Commission are enforced, the result will be that Plaintiff will be deprived of all markets for its domestic gas at rates and charges other than those attempted to be established by the said Railroad Commission in its Opinion and Order, and Plaintiff will be deprived of the right to carry on its business, and will be deprived of its property without due process of law, all in violation of the Fourteenth Amendment and the Commerce Clause of the Constitution of the United States.
- (h) In refusing to include in the rate base of the Plaintiff and in a determination of the present value of its public service property, as more fully appears in "Exhibit A" hereto, certain items of property used and useful by the Plaintiff in its public service business, and in excluding from operating expenses, expenses actually and normally [fol. 3740] incurred by the Plaintiff in the conduct of its said business, and in the exercise of the best judgment of

its officers and directors. The Railroad Commission of Texas unlawfully and unreasonably usurped the prerogatives, duties and authority of the officers and directors of the Plaintiff upon whom rests the responsibility for the management of the Plaintiff's business; all in violation of the rights of the Plaintiff under the Constitution of the United States, and with the result that, to the extent of such arbitrary deductions, Plaintiff is deprived of its property devoted to public use without due process of law, and its property is confiscated, contrary to the provisions of the Fourteenth Amendment to the Constitution of the United States.

(i) The said Order of The Railroad Commission of Texas is void and in excess of the authority conferred by law upon the said Commission in that it deprives Plaintiff of an opportunity to have a judicial determination as to the legality of its contracts and charges to each of the Defendant distributing companies, by arbitrarily requiring the Plaintiff to reduce its charges for its gas to each of the Defendant distributing companies, irrespective of whether such charges be finally sustained as legal or not; and the said Order further on this account seeks to deprive, and does deprive, the Plaintiff of its property and business without due process of law and denies Plaintiff the equal protection of the laws under the Fourteenth Amendment to the Constitution of the United States, and operates to impair the obligations of its contracts with each of the Defend-[fol. 3741] ant distributing companies, contrary to Section 10 of Article 1 of the Constitution of the United States.

### XIV

Each and every one of the said contracts between the Plaintiff and the corporate Defendants providing for the sale by the Plaintiff and purchase by the Defendants of natural gas for domestic purposes at the city gates of the several towns and cities in the State of Texas are affected by the Order, "Exhibit A" attached hereto, of The Railroad Commission of the State of Texas. The result of the promulgation and enforcement of the aforesaid Order is and will be to change and vary the obligations of each of the Defendant distributing companies under their respective

contracts with the Plaintiff in that the said distributing companies will be permitted, and, in effect, compelled to pay thirty-two cents (32¢) per one thousand (1,000) cubic feet for gas delivered to them under their aforesaid contracts, instead of forty cents (40¢) per one thousand (1,000) cubic feet as now required by said contracts. The right and power of The Railroad Commission of the State of Texas to enter the Order in question, thus changing the contracts to which the distributing companies are parties, and their obligations thereunder, are directly and substantially involved herein. Each and every distributing company which is named as a Defendant herein is interested in and will be affected by the enforcement of the Order herein complained of, and is a proper and necessary party to a full and complete determination of the Federal questions [fol. 3742] involving said contracts raised by the Plaintiff in this Bill of Complaint.

Plaintiff shows that said contracts and the business had by the plaintiff pursuant thereto are absolutely necessary for the continuance of Plaintiff as a going concern, and that Plaintiff could not survive without such business, nor can it supply natural gas under said contracts at the rate prescribed by The Railroad Commission without a resultant destruction in the value of its property required in per-

forming its obligations.

Plaintiff represents that with respect to its public service business, its sales of gas for industrial purposes and all purposes other than for domestic use, are profitable to it in that such sales produce substantial net revenues over and above the cost of making such sales. Industrial gas is sold in open market competition with other fuels and it is not possible for Plaintiff to increase its net earnings by increasing its rates and charges for industrial gas or for gas sold for other than domestic purposes.

Furthermore, Plaintiff shows that the distributing companies named as Defendants are necessary and proper parties to the granting of that relief requisite to fully and completely protect it preliminarily and upon final hearing; and that the relief hereinafter prayed against them is ancillary and incidental to the relief sought by the Plaintiff against the enforcement of the Order herein complained of. In this connection, Plaintiff says that while the Order in question does not purport or expressly undertake to pro-

hibit the distributing companies from paying the Plaintiff an amount in excess of thirty-two cents (32¢) per one thou[fol. 3743] sand (1,000) cubic feet for domestic gas purchased at the city gates, nevertheless such is and must be
the necessary and inevitable effect of the enforcement of
such Order.

That unless the said distributing companies are restrained as hereinafter prayed, during the pendency of this suit, Plaintiff believes and so alleges that voluntarily or involuntarily, through fear of violating or aiding and abetting in the violation of the said Order of The Railroad Commission of the State of Texas, "Exhibit A" hereto, and because of the threat of penalties prescribed by law, the Defendant distributing companies will not pay Plaintiff in excess of the rate of thirty-two cents (32¢) per one thousand (1.000) cubic feet prescribed by the said Order. "Exhibit A" hereto, and will be coerced and deterred from paying Plaintiff the rates and charges for domestic gas as fixed and prescribed under the terms of their respective contracts with the Plaintiff governing the sale and purchase of domestic gas, and thereby Plaintiff will be forced to submit to the confiscation of its property without due process of law and in violation of its rights under the commerce and contract clauses of the Constitution of the United States as alleged hereinbefore more specifically, all to its great and irreparable damage, loss and injury.

### XV

Furthermore, if, during the pendency of this suit, as Plaintiff believes and alleges, the distributing companies will be induced and caused to resist and refuse payment of any charges and rates for natural gas furnished and sup-[fol. 3744] plied by Plaintiff other than those that may result from the enforcement of the said Order of The Railroad Commission of the State of Texas, Plaintiff has no adequate remedy at law and no practical way to collect the charges due it under the contracts aforesaid. Plaintiff can not refuse service because of default of the Defendant distributing companies in the payment of bills for domestic gas, without subjecting itself to penalties for violation of the Order of The Railroad Commission of the State of Texas, and without precipitating a large number of suits in various jurisdictions throughout the State of Texas to

restrain its action in this respect and for damages; nor can it attempt to collect its bills through litigation without being subject to an endless multiplicity of suits, the issues in which would be the same as those herein involved. In each of said suits the issues will be the same and it will be necessary to determine whether the rates charged by the Plaintiff are lawful, just and reasonable.

This suit is, therefore, brought to prevent such a multiplicity of suits and in order that all matters in controversy

may be determined in this one proceeding.

Plaintiff has no plain, adequate and complete remedy at law.

Wherefore, being without adequate remedy save in this court of equity, Plaintiff prays the Court:

First, that the rate, charge and price of thirty-two cents (32¢) per one thousand (1,000) cubic feet for domestic gas, as fixed and prescribed in the Opinion and Order of The Railroad Commission of Texas, "Exhibit A" hereto, of [fol. 3745] date September 13, 1933, be decreed to be confiscatory and in violation of the Constitution of the United States, and that said Opinion and Order imposing said rate be declared to be unconstitutional, null, void and unenforceable.

Second, that The Railroad Commission of Texas, its agents, servants, employees and representatives, and the individual members of The Railroad Commission of Texas, and the Attorney General of the State of Texas, Defendants herein, and each of them, as well as their successors in office, and their agents, servants, employees and representatives, and all other persons, be temporarily and permanently restrained and enjoined from any attempt to enforce the said Opinion and Order of The Railroad Commission of Texas of September 13, 1933, "Exhibit A" hereto, or any other order of the said Railroad Commission of Texas in this or any other proceeding based thereon or giving effect thereto. or to compel Plaintiff, its directors, officers, agents, servants and employees, directly or indirectly, whether by penalties, forfeitures or otherwise, in any manner whatsoever, to observe and comply with the said Order in any respect, or to observe or comply with any other Order of The Railroad Commission of Texas that may be based in whole or in part on or which gives any effect to said Opinion

and Order, or to compel Plaintiff, its directors, officers, agents, servants and employees, directly or indirectly, to observe, comply with and keep in force, and charge, bill and collect from the distributing companies to which it delivers domestic gas, the rate of thirty-two cents (32¢) per [fol. 3746] one thousand (1,000) cubic feet prescribed by The Railroad Commission of Texas in its said Opinion and Order, "Exhibit A" hereto, and to prevent or in any way, directly or indirectly, to interfere with Plaintiff, its directors, officers, agents, servants and employees, in charging, billing and collecting for domestic gas delivered by it at the city gates of various towns and cities located in the State of Texas, now or at any time in the future, forty cents (40¢) per one thousand (1,000) cubic feet; and that the enforcement and execution of the said Opinion and Order of the Railroad Commission of Texas of September 13, 1933, "Exhibit A" hereto, be temporarily and permanently enjoined and restrained:

Third, that The Railroad Commission of Texas, its agents, servants, employees and representatives, and the individual members of The Railroad Commission of Texas. and the Attorney General of the State of Texas, Defendants herein, and each of them, as well as their successors in office and their agents, servants, employees and representatives, and all other persons, be temporarily and permanently enjoined and restrained from attempting in any way, directly or indirectly, whether by threat of penalties, forfeitures, or in any manner whatsoever, to compel the distributing companies named to comply with and observe the said Opinion and Order of The Railroad Commission of Texas, of September 13, 1933, "Exhibit A" hereto, or the rate of thirty-two cents (32¢) per one thousand (1,000) cubic feet for domestic gas furnished by Plaintiff to them, and each of them, or to prevent them from paying, or interfering with their paying, the rate, charge and price for [fol. 3747] domestic gas delivered to them by Plaintiff, fixed by their respective contracts with Plaintiff.

Fourth, that the Defendant distributing companies, and each of them, their directors, officers, agents, servants, employees and representatives, and all other persons, be temporarily and permanently restrained and enjoined from observing or complying with the said Order of The Railroad Commission of Texas, "Exhibit A" hereto, or any other order of the said Railroad Commission; or any law,

ordinance or order that may be based in whole or in part on the said Order of The Railroad Commission, "Exhibit A" hereto, or that may purport to or does give any effect thereto, or from failing or refusing to pay to Plaintiff for domestic natural gas delivered by Plaintiff to them at the various city gates, a price or rate per thousand cubic feet less than the price, rate and charge which each and all of said distributing companies have been and are now paying to Plaintiff for such gas.

Fifth, that for the hearing of this cause and with respect to the granting of the temporary and interlocutory injunction and the permanent injunction herein prayed for, this Honorable Court and the Judge hereof call to his assistance two additional Judges, as provided by Section 266 of the Judicial Code of the United States.

Sixth, that Plaintiff have such other and further relief, both general and special, as may be just and equitable in the premises.

[fol. 3748] May it please your Honors to grant unto the Plaintiff a writ of subpœna of the United States of America, issuing out of and under the seal of this Honorable Court. directed to the said Defendants, The Railroad Commission of Texas, Lon A. Smith, C. V. Terrell and E. O. Thompson, said persons being the members of and constituting The Railroad Commission of Texas, James V. Allred, Attorney General of the State of Texas, Community Natural Gas Company, Municipal Gas Company, Texas Cities Gas Company, County Gas Company, The Dallas Gas Company, Waxahachie Gas Company, and Gainesville Gas and Electric Company, corporations, commanding them, and each of them, on a certain day to be named therein, and under a certain penalty, to appear and make answer to this Bill of Complaint, and to perform and abide by such orders, directions or decrees as may be made them in the premises, and that pending the final hearing of this cause, a preliminary and interlocutory injunction may be issued as above prayed. May it likewise please your Honor to authorize issuance of notice of said hearing to Miriam A. Ferguson, Governor of the State of Texas.

And the Plaintiff will ever pray.

Lone Star Gas Company, by Karl F. Griffith, Thompson & Barwise, Ben H. Powell, Roy C. Coffee, Marshall Newcomb, Its Solicitors.

[fols. 3749-3841] UNITED STATES OF AMERICA,
The State of Texas,
County of Dallas, ss:

On this 21st day of September, 1933, before me personally appeared Karl F. Griffith, who being by me first duly sworn, deposes and says that he is Vice-President of Lone Star Gas Company, the Plaintiff herein; that he has read the foregoing Bill of Complaint and knows the contents thereof; that he is familiar with all the matters and facts involved therein, and that he had knowledge of all the facts upon which the special relief prayed for herein is asked, and that all of the allegations, denials and facts therein contained are true.

Karl F. Griffith.

Subscribed and sworn to before me this 21st day of September, A. D. 1933. Chas. G. Hess, Jr., Notary Public in and for Dallas County, Texas. My commission expires the 1st day of June, 1935. (Notarial Seal.)

[fols. 3842-3930] Defendant's Exhibit No. 3 omitted. See Exhibit "A", printed side pages 19, ante.

[fol. 3931]

DEFENDANT'S EXHIBIT No. 4

### Lone Star Gas Company Public Service Operations

Statement of Revenues, Expenses, and Amount Available for Return Based on 32¢ Domestic Gate Rate—Actual Operating Expenses as Reflected by Company's Books—Depreciation and Depletion Allowances as Calculated by Commission

Rate Base as Determined by Commission for Periods Shown Below

Twelve Months Ended December 31st, 1932

Twelve Months Ended June 30th, 1933

[fol. 3932-3933]	Twelve Months Ended		
	December 31st, 1932	June 30th, 1933	
Gross Revenues		* 4	
Gas Sales	\$7,497,578.33	\$7,191,752.46	
Misc'l. Operating Revenues	1,491.98	1,403.52	
Other Non-Operating Revenues	12,192.19	30,423.69	
Total	\$7,511,262.50	\$7,223,579.67	
Deductions from Gross Revenues		** *	
Gas Purchased	\$1,177,334.48	\$1,130,214.01	
Production System Expense	82,923.07	92,190.26	
Gathering System Expense	135,110.30	127,747.99	
Transmission System Expense	454,086.37	434,598.91	
Compressor Station Expense	358,402.61	336,125.79	
New Business Expense	87,528.94	89,725.16	
General Expense	940,748.36	889,146.59	
Uncollectible Bills	5,399,25	4,794.61	
Taxes—Other than Federal	343,693.30	363,693.30	
Cancelled and Surrendered Leases	255,829.03	208,751.84	
Total	\$3,841,055.81	\$3,676,988.46	
Available for Depreciation, Depletion, Fed.		*	
Income Tax & Return	\$3,670,206.69	\$3,546,591.21	
Depreciation and Depletion	987,598.35	997,629.80	
Available for Federal Income Tax and	*		
Return	\$2,682,608.34	\$2,548,961.41	
Federal Income Tax	208,202.84	195,346.60	
Available for Return	\$2,474,405.50	\$2,353,614.81	
road Commission)	\$46,520,137.06	\$46,972,794.61	
Available for Return Per Cent of Rate Base	5.32	5.01	
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[fol. 3934] Defendant's Exhibit No. 5	
Lone Star Gas Company	
Public Service Operations	
Amount Available for Depreciation and Re Base for Twelve Months Ended December	eturn on Rate r 31st, 1931
[fol. 3935] Rate Base (Actual Cost of Public Service Property as Reflected by Books) Amount Available for Depreciation & Return Amount Available for Depreciation & Return—Per Cent of Rate Base	\$47,776,749.63 \$4,605,721.83 9.64
[fol. 3936] Statement of Revenues, Expenses Available for Depreciation and Return T Ended December 31st, 1931	
Operating Revenues:	
Gas Sales Miscellaneous Operating Revenues	\$9,265,639.45 1,631.35
Total Operating Revenues	\$9,267,270.80
Operating Expenses:	
Gas Purchased	\$1,456,830.39
Production System Expense	\$156,541.38
Gathering System Expense	140,961.09
Transmission System Expense	584,115.01
Compressor Station Expense	447,292.41
New Business Expense	126,125.98
General Expense	840,234.83
Total	\$2,295,270.70
Total Gas Expense	\$3,752,101.09
Uncollectible Bills	4,369.63
Taxes—Other than Federal Income	399,008.95
Cancelled and Surrendered Leases	239,230.96
Total Operating Expenses	\$4,394,710.63

### Defendant's Exhibit No. 5—Continued

Operating Earnings Non-Operating Revenues	\$4,872,560.17 35,464.07
Gross Income	\$4,908,024.24
Non-Operating Revenue Deductions: Federal Income Tax	\$302,302.41
Total	\$302,302.41
Amount Available for Depreciation and Return	\$4,605,721.83

### Defendant's Exhibit No. 5—Continued

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### Lone Star Gas Company

Public Service Property at December 31st, 1931

	Investment ner Rooks	Construction	E		Cost at	
Undistributed Intangible Property.	\$6,338,000.00 \$	\$	\$6.338.000.00	Kevaluation	e P	
Production System Property—Gas						
Gas Leases, Rights, & Lands in Fee.	\$1,369,744,17				* 100 00m 00	
Cas Farms	5,127,856.43	5,681.80	5, 133, 538. 23	1,632,694.87	3,500,843,36	
Total	\$6 407 600 go	894 94E E1	001 00			
	00.000,000		40,522,440.11	\$1,632,694.87	\$4,889,751.24	
Cathering and Transmission System Property	\$50,233,511.94	\$31,516.13	\$50,265,028.07	\$13,848.567.57	\$36.416.460.50	
Compressor Station Property.	SG 560 949 10					
	60,009,240.10	10.100,10	\$6,570,909.71	\$1,509,894.51	\$5,061,015.20	
Other Public Service Property						
Automotive Equipment—Net	£919 971 G1	•				
Dallas Machine Shop	100, 201.01	92,317.00	688	\$124,838.78	\$89,849.83	
Drill Tools—Net	480			43,951.37	375	
Gas Connections	020				489	
Gen. Off. Building and Equipment.	234		36		15,050.	
Gen. Off. Furniture and Fixtures.	10		35	69, 606, 70	468,	
Real Estate	161,577.90		161,577,90	79 449 47	198,408.	
Tools and Construction Louisman	570		,570	626,729.49	360,	
The same construction Equipment.	007				12,607.	
Total	\$2,487,332.73	\$2,317.00	\$2.489,649 73	\$1 080 127 04	£1 400 E00 e0	
				100011	80.770, 50£, 10	
Crand Local.	\$72,125,693.37	\$60,340.25	\$72,186,033.62	\$24,409,283.99	\$47,776,749.63	

[fol. 3939]	DEFENDANT'S EXHIBIT No. 6
	Lone Star Gas Company
	Public Service Operations
Amount Ava	ilable for Depresiation and D.

Amount Available for Depreciation and R Base for Twelve Months Ended December	eturn on Rate er 31st, 1932
<ul><li>[fol. 3940] Rate Base</li><li>(Actual Cost of Public Service Property as Reflected by Books.)</li><li>Amount Available for Depreciation &amp; Return</li></ul>	\$50,034,431.70 \$4,658,506.46
Amount Available for Depreciation & Return—Per Cent of Rate Base	9.31
[fol. 3941] Statement of Revenues, Expenses Available for Depreciation and Return, T Ended December 31st, 1932	s, and Amount welve Months
Operating Revenues:	•
Gas Sales Miscellaneous Operating Revenues	\$8,829,713.37 1,491.98
Total Operating Revenues	\$8,831,205.35
Operating Expenses:	
Gas Purchased	\$1,177,334.48
Production System Expense Gathering System Expense Transmission System Expense	\$82,923.07 135,110.30 454,086.37
Compressor Station Expense New Business Expense General Expense	358,402.61 87,528.94 940,748.36
Total	\$2,058,799.65
Total Gas Expense	\$3,236,134,13

### Defendant's Exhibit No. 6-Continued

Uncollectible Bills Taxes—Other than Federal Income Cancelled and Surrendered Leases	5,399.35 343,693.30 255,829.03
Total Operating Expenses	\$3,841,055.81
Operating Earnings Non-Operating Revenues	\$4,990,149.54 20,679.83
Gross Income Non-Operating Revenue Deductions: Federal Income Tax Other Non-Operating Deductions	\$5,010,829.37 \$343,835.27 8,487.64
Total	\$352,322.91
Amount Available for Depreciation and Return	\$4,658,506.46

Defendant's Exhibit No. 6—Continued

Lone Star Gas Company

[fols. 3942-3948]

	Public Se	Public Service Property at December 31st, 1932	December 31s	t, 1932		
	Undistributed Intangible Property	Investment Coper Books Cons \$6,700,000.00 \$.	Completed Construction	Total \$6,700,000.00	Revaluation \$6,500,000.00	Cost at Dec. 31, 1932
	Production System Property—Gas Gas Leases, Rights, & Lands in Fee Gas Farms.	\$1,276,931.11 6,434,413.29	\$15,980.73 14,135.11	\$1,292,911.84 6,448,548.40	2,136,703.48	\$1,292,911.84 4,311,844.92
	Total	\$7,711,344.40	\$30,115.84	\$7,741,460.24	\$2,136,703.48	\$5,604,756.76
	Compressor Station Property	\$6,559,250.68		\$6,570,631.07	\$1,509.894.51	\$5,060,736,56
	Other Public Service Property					
	Automotive Equipment—Net Dallas Machine Shop Drill Tools—Net	\$184,631.77 182,804.96	\$568.32 277.80	\$185,200.09 183,082.76	\$124,838.78 43,951.37	361
,	Gas Connections G. O. Building and Equipment	15,215.42		15,215.42 633 953 33	149 481 92	34,559.71 15,215.42
	Gen. Office Furniture & Fixtures. Real Estate.	886.		886.	62,696.70	189.
	Telephone & Telegraph System. Tools & Construction Equipment.	1,026,072.15	1,603.71	675.	644, 476. 23	383,199.63 13,784.40
	Total	\$2,521,485.71	\$2,449.83	\$2,523,935.54	\$1,097.873.78	\$1,426,061.76
	Grand Total	\$75,281,341.54	\$64,679.83	\$75,346,021.37	\$25,311,589.67	\$50,034,431.70

\$3,608,088.58

### [fol. 3949] Defendant's Exhibit No. 8

### Lone Star Gas Company Public Service Operations

Public Service Operations			
Amount Available for Depreciation and Return on Rate Base for Twelve Months Ended December 31st, 1933			
(Actual Cost of Public Service Property as Reflected by Books.)	\$49,837,026.06		
Amount Available for Depreciation & Return Amount Available for Depreciation & Return —Per Cent of Rate Base	\$3,892,748.58 7.81		
[fol. 3951] Statement of Revenues, Expenses, Available for Depreciation and Return, Tended December 31st, 1933			
Operating Revenues:	1		
Gas Sales Miscellaneous Operating Revenues	\$7,688,724.10 1,442.91		
Total Gas Revenues	\$7,690,167.01		
Operating Expenses:			
Gas Purchased	\$1,086,587.44		
Production System Expense	105,554.86		
Gathering System Expense	131,326.29		
Transmission System Expense	431,520.56		
Compressor Station Expense	338,433.01		
New Business Expense	99,793.94		
General Expense	859,234.88		
Total	\$1,965,863.54		
Total Gas Expense	\$3,052,450.98		
Uncollectible Bills	6,530.77		
Taxes—Other than Federal Income	360,476.91		
Cancelled and Surrendered Leases	188,629.92		

Total Operating Expenses

### Defendant's Exhibit No. 8—Continued

Operating Earnings Non-Operating Revenues	\$4,082,078.43 61,198.22
Gross Income	\$4,143,276.65
Non-Operating Revenue Deductions: Federal Income Tax Other Non-Operating Deductions	\$223,331.34 27,196.73
Total	\$250,528.07
Amount Available for Depreciation and Return	\$3,892,748.58

Defendant's Exhibit No. 8—Continued

Lone Star Gas Company

[fols. 3952-3953]

		Cost at Dec. 31, 1933 , \$200,000.00	\$1,173,844.35 4,234,620.54	\$5,408,464.89 \$37,727,914.45 \$5,040,902.76	\$92,912.54 139,785.99 25,713.98 15,089.99 497,218.24 212,021.28 78,768.53 383,169.88	\$1,459,743.96 \$49,837,026.06
		Revaluation \$6,500,000.00	8	\$5,408,464.89 \$. 52,058,668.04 \$14,330,753.59 \$6,558,177.99 \$1,517,275.23	644,476.23	\$644,476.23
	,1933	Total \$6,700,000.00	\$1,173,844.35 4,234,620.54	\$5,408,464,89 \$52,058,668.04 \$6,558,177.99	\$92,912.54 139,785.99 25,713.93 15,089.99 497,218.24 212,021.28 78,768.53 1,027,646.11 15,063.58	\$2,104,220.19 \$72,829,531.11
us Company	December 31st	Completed Construction	5. \$ . 184.04	5 \$184.04 5 \$14,180.19 4 \$1,011.85	8611.38	\$611.38 \$15,987.46
Lone Star Gas Company	Public Service Property at December 31st,,1933	Investment Comple per Books Construct \$6,700,000.00 \$	\$1,173,844.35 4,234,436.50	\$5,408,280.85 \$52,044,487.85 \$6,557,166.14	\$92,301.16 139,785.99 25,713.93 15,089.99 497,218.24 212,021.28 78,768.53 1,027,646.11 15,063.58	\$2,103,608.81 \$72,813,543.65
13			Gas Farms. Total.	Property	Automotive Equipment—Net. Dallas Machine Shop. Drill Tools—Net. Gas Connections. Gen. Off. Building & Equipment. Gen. Off. Furniture & Fixtures. Real Estate. Telephone & Telegraph System. Tools and Construction Equipment.	Grand Total.
10	3-	0104	,		/	

[fol. 3954]	DEFENDANT'S EXHIBIT No. 9	
	Lone Star Gas Company	
	Public Service Operations	
Amount Ava Base for	ilable for Depreciation and Re Twelve Months Ended March	turn on Rate 31st, 1934
[fol. 3955] R (Actual Co as Reflec Amount Avai Amount Ava	ate Base :	\$49,872,761.09 \$4,120,143.52 8.26
Available f	tatement of Revenues, Expenses, for Depreciation and Return, Tych 31st, 1934	
Operat	ing Revenues:	
Gas Sales Miscellaneous	S Operating Revenues	\$7,926,274.88 1,596.78
Total	Operating Revenues	\$7,927,871.66
	ing Expenses:	
Gas Purchase	ed	\$1,096,156.08
Production S	System Expense	\$108,299.55
Gathering Sy	stem Expense	131,713.95
Transmission	System Expense	426,114.97
	Station Expense	346,306.81
	s Expense	
New Business		101,308.68
New Business General Expe	ense	101,308.68 837,107.65
General Expe	ense	
General Expe	ense	837,107.65
General Expe	as Expense	\$37,107.65 \$1,950,851.61 \$3,047,007.69
Total Total Uncollectible	ense	\$37,107.65 \$1,950,851.61

Total Operating Expenses

\$3,583,322.42

### Defendant's Exhibit No. 9—Continued

Operating Earnings Non-Operating Revenues	\$4,344,549.24 62,027.10
Gross Income	\$4,406,576.34
Non-Operating Revenue Deductions: Federal Income Tax	\$259,297.97
Other Non-Operating Revenue Deductions	27,134.85
Total	\$286,432.82
Amount Available for Depreciation and Return	\$4,120,143.52

## Defendant's Exhibit No. 9-Continued

3 .	[fols. 3957–3958] Public St	Lone Star Gas Company Public Service Property at March 31st, 1934	ompany March 31st, 1	1934		
	Undistributed Intangible Property	Investment Co per Books Con \$6,700,000.00 \$.	Completed Construction	Total \$6,700,000.00	Revaluation \$6,500,000.00	March 31, 1934 \$200,000.00
	Production System Property—Gas Gas Leases, Rights, & Lands in Fee Gas Farms.	\$1,173,256.80 4,234,229.29	\$6,054.36	\$1,179,311.16 4,234,499.30	•	\$1,179,311.16 4,234,499.30
1."	Total	\$5,407,486.09 \$2,084,493.24 \$49,976,714.42	\$6,324.37 \$10,192.95 \$15,718.37	\$5,413,810.46 \$2,094,686.19 \$49,992,432.79	\$600,210.39	\$5,413,810.46 \$1,494,475.80 \$36,261,908.59
	Compressor Station PropertyOther Public Service Property:	\$6,556,543.48	\$6,778.47	\$6,563,321.95 \$87,054.13	\$1,517,275.25	054
*	Automotive Equipment—Net. Dallas Machine Shop. Drill Towns Net. Gas Connections. Gen. Off. Building and Equipment.			139,993.75 26,390,23 15,523.05 497,223.85 212,961,23		139,993.75 26,390.23 15,523.05 497,223.85 212,961.23
	Gen. Off. Furniture and Fixtures Real Estate Telephone and Telegraph System Tools and Construction Equipment	768 595 385		78,768.53 1,027,695.75 15,385.23	644,476.23	768. 219. 385.
	Total	\$2,098,417.25	\$2,578.50	\$2,100,995.75	\$644,476.23	
, *	Grand Total	\$72,823,654.48	\$41,592.66	\$72,865,247.14	\$22,992,486.05	\$49,872,761.09

### [fol. 3959] Defendant's Exhibit No. 10.

### Lone Star Gas Company

### **Public Service Operations**

Amo	unt A	vail	lable f	or Depre	ciation	and I	Return	on	Rate
	Base	for	Twelv	e Months	Ended	April	30th, 1	1934	
				*					

[fol. 3960] Rate base	\$49,858,751.23
(Actual Cost of Public Service Property as	,
Reflected by Books.)	
Amount Available for Depreciation and Re-	
turn	4,114,322.81
Amount Available for Depreciation and Re-	
turn—Per Cent of Rate Base	8.25

[fol. 3961] Statement of Revenues, Expenses, and Amount Available for Depreciation and Return, Twelve Months Ended April 30th, 1934

### Operating Revenues:

Operating Revenues:	
Gas Sales Miscellaneous Operating Revenues	
Total Operating Revenues	\$7,923,087.30
Operating Expenses:	
Gas Purchased	\$1,093,297.36
Production System Expense	\$107,403.80
Gathering System Expense	
Transmission System Expense	
Compressor Station Expense	349,311.51
New Business Expense	
General Expense	

Total	· de conse	 \$1,952,507.53
	4	

### Defendant's Exhibit No. 10-Continued

Uncollectible Bills	6,474.03
Taxes—Other than Federal Income	360,476.91
Cancelled and Surrendered Leases	172,958.04
Total Operating Expenses	\$3,585,713.87
Operating Earnings'	4,337,373.43
Non-Operating Revenues	62,581.24
Gross Income	\$4,399,954.67
Non-Operating Revenue Deductions:	
Federal Income Tax	\$258,481.70
Other Non-Operating Deductions	
Total	\$285,631.86
Amount Available for Depreciation and Return	\$4.114.322.81

\$49,858,751.23

\$22,992,486.05

\$72,851,237.28

\$18,754.51

\$72,832,482.77

# Defendant's Exhibit No. 10—Continued

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[1018. 3962–3963]	Lone Star Gas Company	Company			
Public	Public Service Property at April 30th, 1934	at April 30th,	1934		
Undistributed Intangible Property	Investment Compl per Books Constru \$6,700,000.00 \$	Completed Construction	Total \$6,700,000.00	Revaluation \$6,500,000.00	Cost at April 30, 1934 \$200,000,00
Production System Property—Gas Gas Leases, Rights, & Lands in Fee Gas Farms	\$1,158,541.63 4,235,259.66	\$3,882.69 4.26	\$1,162,424.32 4,235,263.92	•• .	\$1,162,424.32 4,235,263.92
Total	\$5,393,801.29	\$3,886.95	\$5,397,688.24		\$5,397,688.24
athering System Property	2,095,602.85	1,294.36	2,096,897.21	600,210.39	1,496,686.82
ransmission System Property	49,985,847.45	6,632.77	49,992,480.22	13,730,524.20	36, 261, 956.02
Compressor Station Property.	6,557,578.85	5,672.51	6,563,251.36	1,517,275.23	5,045,976.13
Juner Public Service Property					
Automotive Equipment—Net Dallas Machine Shop Drill Tools—Net	\$83,835.24 139,981.59	\$712.58 555.34	\$84,547.82		547
Gas Connections.	16.032.72		16,029,79		122
Gen. Office Building & Equipment. Gen. Office Furniture & Fixtures	497,223.85		497,223.85		032 223
Real Estate	78,768.53		78 768 53		501
Telephone and Telegraph System  Tools and Construction Equipment	1,027,695.75		1,027,695.75	644, 476. 23	383,219.52 15,491.37
Total	\$2,099,652.33	\$1,267.92	\$2,100,920.25	\$644,476.23	\$1,456,444.02
Grand Total	\$72,832,482.77	\$18,754.51	\$72.851.237.28 \$22.002.486.05		640 959 751 99

### DEFENDANT'S EXHIBIT NO. 11

Lone Star Gas Company Statement Showing Detail of Operating Expense for Periods Shown Below

[fols. 3964-3965]

Twelve Months Ending.

Production System Expense:	Dec. 31, 1931	Dec. 31, 1932	June 30, 1933	Dec. 31, 1933	Mar. 31, 1934
306 Drilling Costs	071	000			
219 Abandoning Wells	. 001	907	\$10,747.35	\$18,704.52	\$19.221.57
ato at in the control of the control	389	222	635.93	1.601.52	1 696 59
513 Well Kentals and Koyalties	30.601.42	37, 629 85	338	45 441 54	40, 464, 00
320 Superintendence of Lifting	906	101	27.000.27	10, 111.01	40,404.03
291 Tohon Tifting	1,090.20	4,424.28	273	5,868.58	5.834.90
Oct Labout Lalumg.	131.84	18.62	. 24.53	25 36	95 36
325 Lifting Supplies and Expenses	1.43	5 73	16.01	14 65	00.07
326 Maintenance	147 50		10.01	14.00	4.07
298 Poneiming and Cleaning and William	14	40	112		143.14
oco incipatring and Cleaning out Wells.	,377.	.771	23, 133, 11	31.777.90	30 797 95
ozy iviscellaneous Lifting Expenses	7,625.56	1,514.07	1,959.12	1,932.68	2,181.65
Total Production System Expense	\$156.541.38	\$82 993 07	809 100 98	C105 554 96	900 000
•	200	0.076	635, 130. 50	100,004.00	\$108,299.55
Gathering System Expense:					
Onerations					
- Containing					
341 Superntendence		056	653	40	066
342 Labor—Operating Wells	00	000		200	000
343 Field Line I whor	9	000	124	70	796
244 Field Messen Chair	77	307	230	49	327
off Field Measuring Station—Labor.	18,963.72	16,834.79	15, 233, 79	15, 470, 27	15,892,96
345 Superintendence—Supplies and Expenses	95	960	137	40	163
346 Gas Wells—Supplies and Expenses.	12	167	300	90	
347 Field Line—Supplies and Expenses	65	277	000		100
348 Field Measuring Station Sunnlies & Fv.	3		207	60	36
Denses.	925	440	00 040 4	000	
240 Other Sunnling and Present	9,200.10	0,449.80	7,358.62	803	654
250 Democratica and Expenses	9,845.59	790.40	1,176.18		1.223.83
oo Damages	70.20	74.43	31.38	40.94	66.42
Total	609 906 908	*00 01# 00		-	
	987,230.36	\$98,847.03	\$92,641.26	\$96,258.89	\$98,415.24

\$1,612.99 \$1,149.75 \$8554.13 \$1,329.70 \$12,683.23 \$11,400.40 \$11,111.22 \$8,989.60 \$465.96 \$23,189.21 \$2,204.55 \$2,400.06 \$23,596.38 \$8,380.28 \$8,380.28 \$772.29 \$6.93‡ \$243.59 \$430.72 \$6.93‡ \$25.04 \$430.72 \$48,664.72 \$86,263.27 \$86,263.27 \$855,106.73 \$813,326.29 \$135,110.30 \$127,747.99 \$131,326.29 \$27,875.69 \$27,875.69 \$27,875.69 \$27,875.69 \$27,872.03 \$27,872.03 \$27,872.03 \$27,872.03 \$21,875.14 \$15,584.08 \$11,094.55 \$11,742.59 \$11,742.59 \$11,742.59 \$11,003.25
\$\begin{align*} \begin{align*} \begi
\$1,149 11,400 11,400 12,204 11,400 12,204 12,204 135,110 12,584 112,584 115,524 15,955 15,998 15,998 15,998 15,998 15,998 15,998 15,998 15,998 15,998 15,998 15,998 15,998
\$1,612.99 12,683.23 98,502 23,189.21 8,380.28 2,695.69 \$4,54.72 \$60,580.76 86,454.82 31,433.20 22,106.89 27,875.81 17,867.06 12,717.68 21,875.14 6,825.41 16,201.13

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Defendant's Exhibit No. 11—Continued

Lone Star Gas Company Statement Showing Detail of Operating Expense for Periods Shown Below

		IWE	weive Months Ending		
4 faintenance: 372 Superintendence of Maintenance. 373 Maintenance Measuring Station Struc-	Dec. 31, 1931 \$7,888.08	Dec. 31, 1932 \$3,372.08	June 30, 1933 \$3,665.97	Dec. 31, 1933 \$5,700.55	Mar. 31, 1934 \$5,318.67
tures 374 Maintenance Transmission Lines 375 Maintenance Messuring Station Fourier	22,202.70 139,504.48	6,582.18 106,597.18	2,571.73 96,989.40	9,885.37	10,719.60
	65,684.60 1,088.24 407.50	48,679.03 865.88 2,723.62	47,730.31 366.90 2,554.82	45,692.65 479.71 2,435.23	47,436.43 513.62 2,441.78
	21,780.66	8,325.45 11,318.11	7,690.64	9,358.77 5,628.54	
Total.	\$275,904.56	\$188,463.53	\$164,891.81	\$162,716.03	\$159,632.73
Total Transmission System Expense.	\$584,115.01	\$454,086.37	\$434,598.91	\$431,520.56	\$426,114.97

\$39,039.43 81,947.76 33,023.66 66,185.57 18,902.68 5,621.34 2,068.75 16,624.36 \$46,859.27 7,069.15 6,026.31 12,876.97 3,118.28 6,943.28 \$16,140.99 19,827.92 1.93 55,266.43 10,071.41 \$263,413.55 \$82,893.26 \$346,306.81 \$101,308.68 83,746.25 83,791.08 27,983.74 65,049.15 19,593.90 5,234.56 2,115.69 16,567.09 47,124.84 6,831.22 4,718.05 9,079.22 3,341.71 7,256.51 .46 \$13,990.36 20,357.09 1.93 54,847.92 10,596.64 \$78,351.55 **5**338, 433.01 \$99,793.94 \$260,081 \$40,788.58 83,581.76 23,837.58 64,049.12 19,364.25 4,599.61 1,807.98 17,634.05 \$51,719.46 6,615.36 3,121.39 6,019.59 4,927.23 8,059.83 \$255,662.93 \$10,963.57 20,017.41 47,918.08 \$80,462.86 \$336,125.79 . \$89,725.16 \$47,013.51 7,677.59 3,152.39 6,045.55 4,783.59 7,648.10 \$41,836.69 95,805.09 24,136.22 72,475.30 20,770.15 6,426.04 1,455.22 19,177.17 \$282,081.88 \$9,078.37 20,715.95 45,407.69 \$76,320.73 \$358,402.61 \$87,528.94 28, 443.95 131, 385.83 28, 345.16 80, 446.01 24, 183.80 8, 020.66 2, 310.41 29, 340.04 \$33,107.46 8,999.57 6,235.46 9,829.51 785.56 8,858.99 359,475.86 \$9,548.77 27,969.98 81,234.85 7,372.38 \$87,816.55 \$447,292.41 \$126,125.98 Other Compressor Station Labor..... New Business Advertising Salaries New Business Soliciting and Commissions Other New Business Labor Advertising Supplies and Expenses.... Tool Expense Miscellaneous Supplies and Expenses Total Compressor Station Expense Maintenance of Water System. Maintenance of Pipe and Fittings... Maintenance of Structures..... Changing Construction.
Maintenance of Other Equipment Total New Business Expense Superintendence... Engineers and Oilers—Labor Lubricants.... New Business Expense: Total Total Water... Maintenance: Fuel Operation: 33337

[fols. 3966-3967]

Compressor Station Expense:

Lone Star Gas Company
Statement Showing Detail of Operating Expense
for Periods Shown Below

Twelve Months Ending

General Expense:	Dec. 31, 1931	Dec. 31, 1932	June 30, 1933	Dec 31 1033	Mar 21 1024	
461 Management Fees and Expenses	275	107 107 04	00 022 000	0001 (10 :000	Mai. 91, 1901	
Administrative Salaries	145 745 50	181,191.81	883,573.88	\$75,940.60	\$78,294.78	
	(40	121,454.05	118,640.51	118,248.00	761	
AGA Control General Office Dataries	820	299,001.89	301,602.77	312,304,38	137	
404 General Omce Supplies and Expense	894	11.871.96	14.102.12	15, 160, 00	970	
465 General Off. Traveling & Incidental Ex-				00:00		
penses	200	39 413 98	126	00 040 00	004	
466 General Stationery and Printing	1	07.011.	100	20,218.00	286	
	110	17,330.00	963	12,213.71		
TO COMPANY TANDERSON	420	48,279.18	686	52.182.40	201	
405 General Office Kent.	279	16,404.72	497	52, 571 77	59 536 70	
409 Maintenance General Structures	24,650.71	29,572,81	13,106,66			
470 Maintenance General Office Equipment.	146	2,470 16	059	N 971 7A	0 077	
471 Maintenance Other General Equipment.		21.011		4,.112,4	2,273.00	
472 Telephone and Telegraph System Labor	19 077 10					
473 Tel and Tel System Supplies and De	61.110,21	10,014.62	8,896.28	8,321.63	8,162.81	
Total and Total System Supplies					*.	
	6,044.29	5,472.91	5.246.39	4.096.05	3 100 26	
4/4 Maint. of Telephone and Telegraph Sys-				00.000	07:00110	
tem.	10.109.98	804	776	076	010	
476 Regulatory Commission Expense	17 605 96	740	2	000	212	
477 Charitable Denations	00.000.01	100,749.01	130	792	204	
A70 Triming Deliacions	9,848.67	331.			10.021.05	
470 Injuries and Damages.	7.49	339.56		47	838	
479 Insurance Expense	32,647.86	28,830,99	26.368.89	27 724 50	97 048 08	
484 Welfare and Pensions.	502	417	140		00 101 00	
481 Miscellaneous General Administrative			61.1	. 107	001	
Exp	49.012.06	30 900 09	EO 000 EE	200		
	00.000	28,500.95	90,980.99	22,042.86	32,216.03	
Total General Expense	\$840,234.83	\$940,748.36	\$889,146.59	\$859.234.88	\$837 107 65	
				2000	00:101	
Grand Total Operating Expense	\$2,295,270.70	\$2,058,799.65	\$1,969,534.70	\$1,965,863.54	\$1,950.851.61	
		-				

### [fol. 3968]

### DEFENDANT'S EXHIBIT No. 12

### Lone Star Gas Company

Statement Showing Detail of Operating Expense, Twelve Months Ended April 30th, 1934

• 100	
[fol. 3969] Production System Expense:	
306 Drilling Costs	\$19,221.57
312 Abandoning Wells	1,704.12
313 Well Rentals and Royalties	48,476.47
320 Superintendence of Lifting	5,713.82
321 Labor—Lifting	27.12
325 Lifting Supplies and Expenses	4.37
326 Maintenance	125.65
328 Repairing and Cleaning out Wells	30,091.16
329 Miscellaneous Lifting Expense	2,039.52
Dapense	2,009,02
Total Production System Ex-	
pense	\$107,403.80
Gathering System Expense:	
Operations:	
341 Superintendence	402 070 77
342 Labor—Operating Wells	\$23,970.77
343 Field Line—Labor	27,703.98
344 Field Measuring Station—Labor	8,913.11
345 Superintendence—Supplies & Ex-	16,105.18
nongos & Ex-	0 7 10 77
penses	3,541.75
346 Gas Well—Supplies and Expenses	8,261.78
347 Field Line—Supplies and Expenses	2,051.48
348 Field Measuring Station—Supplies	
& Exp.	6,840.23
349 Other Supplies and Expenses	1,201.27
350 Damages	94.44
Total	\$98,683.99
Maintenance:	,
351 Superintendence of Maintenance	\$1;143.46
352 Maintenance of Field Lines	8,027.71
353 Maintenance of Field Structures	118.97
354 Maintenance of Field Measuring Sta-	110.91
tions	24 283 88

356 Changing Construction	
357 Other Maintenance Expenses	
Total	
Total Gathering System Ex- pense	
Transmission System Expense:	
•	
366 Superintendence Supplies and Ex-	
penses	
367 Measuring Station Supplies and Ex-	
368 Transmission Lines Supplies & Ex-	
369 Transmission System Rents	
370 Transmission & Compressor Chgs.	
Paid Others	
371 Damages	
m.4-1	
Total	
Structures	
Equipment	
376 Maintenance Gas Cleaners	
377 Maintenance River Crossings	
378 Maintenance Other Transmission	
_	
Total Transmission System Expense	
	Total Gathering System Expense: Operations: 361 Superintendence 362 Line Walkers 363 Inspection 364 Measuring Station Labor 365 Other Transmission System Labor 366 Superintendence Supplies and Expenses 367 Measuring Station Supplies and Expenses 368 Transmission Lines Supplies & Expenses 369 Transmission Lines Supplies & Expenses 370 Transmission & Compressor Chgs. Paid Others 371 Damages  Total  Maintenance: 372 Superintendence of Maintenance 373 Maintenance Measuring Station Structures 374 Maintenance Transmission Lines 375 Maintenance Measuring Station Equipment 376 Maintenance Gas Cleaners 377 Maintenance River Crossings 378 Maintenance River Crossings 378 Maintenance Other Transmission Line Equip. 379 Changing Construction  Total Total Transmission System

[fols. 3970-3971] Compressor Station	Expense:
'Operations:	
381 Superintendence	\$39,310.78
382 Engineers and Oilers—Labo	
383 Other Compressor Station L	
384 Fuel	
385 Water	,
386 Lubricants	,
387 Tool Expense	
388 Miscellaneous Supplies and E	xpenses 16,526.24
Total	
Maintenance:	φ200,100.04
•	\$46.160.49
389 Maintenance of Machinery	
390 Maintenance of Water System	
391 Maintenance of Pipe and Fit	
392 Maintenance of Structures	
393 Changing Construction	
394 Maintenance of Other Con	
Sta. Equip.	7,446.78
Total	\$84,124.67
Total Compressor Star	
pense	\$349,311.51
New Business Expense:	
442 New Business Salaries	
443 New Business Soliciting an	
missions	19,891.66
445 Other New Business Labor	
446 Advertising Supplies and Ex	
447 New Business Supplies and E	xpenses 9,948.79
Total New Business E	xpense \$102,140.30
General Expense:	
461 Management Fees and Expen	ses \$78,244.38
462 Administrative Salaries	
463 Other General Office Salaries	
464 General Office Supplies and E	
201 Concrete Onlee Supplies and E	14,000.33
· ·	

465 Gen. Office Traveling & Incidental	*
Exp	29,694.04
466 General Office Stationery and Print-	
ing	12,471.25
467 Law Expenses	49,103.10
468 General Office Rent	52,508.51
. 470 Maintenance General Office Equip-	
ment	
472 Telephone and Telegraph System	
Labor	8,097.72
473 Telephone and Telegraph Sys. Sup-	
plies & Exp.	
474 Maintenance of Telephone & Tele-	0,120.10
graph System	9,454.70
476 Regulatory Commission Expenses	44,361.36
477 Charitable Donations	9,883.50
478 Injuries and Damages	838.34
479 Insurance Expénse	27,611.28
480 Welfare and Pensions	8,073.30
481 Miscellaneous General Administra-	0,010.00
tive Exp.	38,203.98
	30,203.30
Total General Expense	¢929 114 07
Total General Expense	ф052,114.91
Grand Total Operating Ex-	
pense	\$1,902,007.03

### [fols. 3972-3975] DEFENDANT'S EXHIBIT No. 13

Lone Star Gas Company Public Service Operations Accounting Schedules

Based on Findings by Railroad Commission of Texas and Set Out in Their Opinion and Order Dated September 13, 1933

[fol. 3976] Summarization of Information Shown on Schedules Included in This Report

### · Section No. 1:

Based on actual revenues (40¢ Domestic Gate Rate), with operating expenses, depreciation and depletion allowance as

found and allowed by the Commission, and Rate Base as found by Commission and set out in their Opinion and Order. The amount available for return, expressed as a percentage of the Rate Base, is as shown below:

Twelve	Months	Ended	December 31st, 1931	8.15%
4.6	66	66 '	December 31st, 1932	8.23%
66	6.6	4.4	June 30th, 1933	7.55%
- 44	6.6	6.6	December 31st, 1933	6.01%
"	4.6	4.6	March 31st, 1934	6.42%

### Section No. 2:

Based on actual revenues (40¢ Domestic Gate Rate), with operating expenses, other than gas purchased expense, as found and allowed by Commission, depreciation and depletion allowance calculated in same manner and with same annual rates as found and used by Commission in their Opinion and Order. Rate Base is the amount found by Commission at December 31st, 1931, plus net additions at actual cost to the Company. Based upon the above information, the amount available for return, expressed as a percentage of the Rate Base, is as shown below:

Twelve	Months	Ended	December 31st, 1931	8.15%
66	4.6	66	December 31st, 1932	7.94%
6.6	66 "	6.6	June 30th, 1933	7.42%
- "		. 66	December 31st, 1933	5.98%
4.4	. 66	. "	March 31st, 1934	6.41%

### [fol. 3977] Section No. 3:

Based on adjusted revenues, after giving effect to Commission Order of 32¢ Domestic Gate Rate, with operating expenses, depreciation and depletion allowances as found and allowed by the Commission, and Rate Base as found by Commission and set out in their Opinion and Order dated September 13th, 1933. Based upon these findings the amount available for return, expressed as a percentage of the Rate Base, is as shown below:

Twelve	Months	Ended	December 31st, 1931	5.56%
"	6.6	6.6	December 31st, 1932	5.76%
66	4.4	"	June 30th, 1933	5.22%
"	6.6	6.6	December 31st, 1933	3.97%
	. 44		March 31st, 1934	4.31%

### Section No. 4:

Based on adjusted revenues, after giving effect to Commission Order of 32¢ Domestic Gate Rate, with operating expenses, other than gas purchased expense, as found and allowed by the Commission, depreciation and depletion allowance calculated in same manner and with same annual rates as found and used by Commission in their Opinion and Order. Rate Base is the amount found by Commission at December 31st, 1931, plus net additions at actual cost to the Company. Based upon the above information, the amount available for return, expressed as a percentage of the Rate Base, would be as follows:

$\mathbf{I}$	welve	Months	Ended	December 31st, 1931	5.56%
	"	"		December 31st, 1932	5.57%
	"	4.4	4.4	June 30th, 1933	5.17%
	64	" " .	6.6	December 31st, 1933	4.01%
•	6.6	4.6	"	March 31st, 1934	4.36%

[fol. 3978]

Section No. 1

Basis of Calculations Included in Schedules Incorporated in This Section of Report

### 1. Gas Sales:

Based on 40¢ Domestic Gate Rate.

### 2. Rate Base:

Based on findings by Railroad Commission and as set out in their Opinion and Order dated September 13th, 1933.

### 3. Operating Expenses:

Based on findings by Railroad Commission and as set out in their Opinion and Order dated September 13th, 1933.

### 4. Depreciation and Depletion:

Based on findings by Railroad Commission and as set out in their Opinion and Order dated September 13th, 1933.

### 5. Federal Income Tax:

Based on Amount Available for Return as shown in schedules, less interest charges paid by the Company. The remainder being used as the basis of calculation at the prevailing rate.

[fol. 3979]

Lone Star Gas Company

Public Service Operations.

Statement of Revenues, Expenses, and Amount Available for Return

(Based on 40¢ Domestic Gate Rate and Operating Expenses, Depreciation, and Depletion Calculated In Same Manner as Used by Commission and Set Out in Their Opinion and Order Dated September 13th, 1933)

### For Periods Shown Below

		Tw	Twelve Months Ended	70		
Gas Sales. Miscel. Operating Revenues. Other Non-Operating Revenues.	December 31st, 1931 \$9,265,639.45 1,631.35 36,610.96	December 31st, 1932 \$8,829,713.37 1,491.98 20,326.95	June 30th, 1933 \$8,455,136.94 1,403.52 40,435.07	December 31st, 1933 \$7,688,724.10 1,442.91 35,639.48	March 31st, 1934 \$7,926,274.88 1,596.78 36,503.31	
Total.	\$9,303,881.76	\$8,851,532.30	\$8,496,975.53	\$7,725,806.49	\$7,964,374.97	
Gas Purchased Gas Purchased Production System Expense Transmission System Expense Compressor Station Expense New Business Expense General Expense	\$1,456,830.39 90,669.82 140,961.09 584,115.01 447,292.41 120,125.59	\$1,247,561.78 68,634.52 135,110.30 454,086.37 358,402.61 87,528.94	\$1,219,883.37 76,442.91 127,747.99 434,598.91 336,125.79 89,725.16	\$1,182,185.66 86,850.34 131,326.29 431,520.56 338,433.01 99,793.94	\$1,198,160.63 89,077.98 131,713.95 426,114.97 346,306.81	
Uncollectible Bills. Taxes—Other than Federal. Management Fees and Expenses. Recalls for Commission Expenses.	369	399.	693	530. 476.	475. 476.	
Dry Hole Expense Cancelled and Surrendered Leases.	17,695.86 79,453.12 99,140.73	12,422.54 70,635.93 137,446.63	15,089.87 70,635.93 137,446.63	17,490.09 68,464.51 172,676.50	17,490.09 68,464.51 172,676.50	223
Total	\$4,176,826.58	\$3,610,733.75	\$3,573,022.08	\$3,612,250.47	\$3,622,060.07	30

Lone Star Gas Company

Public Service Operations

Statement of Revenues, Expenses, and Amount Available for Return

(Based on 40¢ Domestic Gate Rate and Operating Expenses, Depreciation, and Depletion Calculated In Same Manner as Used by Commission and Set Out in Their Opinion and Order Dated September 13th, 1933)

For Periods Shown Below

•			Tw	Twelve Months Ended	P	
Available for Depressistion Day	T long to		December 31st, December 31st, 1931	June 30th, 1933	December 31st, 1933	March 31st, 1934
come Tax, and Return  Depreciation and Depletion	ledon, rederal in-		\$5,127,055.18 \$5,240,798.55 983,698.43 987,598.35.	\$4,923,953.45 997,629.80	\$4,113,556.02 1,000,017.75	\$4,342,314.90 1,001,440.56
Available for Federal Income Tax and Return Federal Income Tax	x and Return	\$4,143,356.75 375,116.98	\$4,253,200.20 424,159.22	\$3,926,323.65 384,733.91	\$3,113,538.27	\$3,340,874.34 311,929.74
Available for Return		\$3,768,239.77	\$3,829,040.98	\$3,541,589.74	\$2,835,447.95	\$3,028,944.60
Kate Base: (As set out in findings by C Rate Base Calculations in th	Commission. See this report)		\$46,246,617.53 \$46,520,137.06 \$46,972,794.61 \$47,180,440.21 \$47,192,765.79	\$46,972,794.61	\$47,180,440.21	. \$47,192,765.79
Available for Return: Percent of Rate Base		8.15	8.23	7.55	6.01	6.01 6.42

· Indicates red figures.

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[fol. 3980] Lone Star Gas Company		•		
Comparative Statement of Revenues and Expenses (Based on 40¢ Domestic Gate Rate)	xpenses			
Twelve Months Ended December 31st, 1931	1931			
Gross Revenues  Gas Sales  Miscell. Operating Revenues  Other Non-Operating Revenues	As Per Company Exhibits \$9,265,639.45 1,631.35 35,464.07	Commission Adjustments	As Per Commission \$9,265,639.45 1,631.35 36,610.96	
Total	\$9,302,734.87	\$1,146.89	\$9,303,881.76	
Deductions from Gross Revenues				
Gas Purchased Production System Evanage	\$1,456,830.39		\$1.456.830.39	
Gathering System Expense	90,669.82		90,669.82	
Compressor Station Expense	584,115.01		584,115.01	
General Expense	126,125.98		126,125.98	
Uncollectible Bills Taxes—Other than Federal	4,369.63		4,369.63	
Management Fees & Expenses Regulatory Commission Expense	91,375.38	\$91,375.38*	399,008.95	
Dry Hole Expense. Cancelled & Surrendered Leases.	65,871.56	13,581.56	17,695.86 79,453.12	
Total	203,200.90	140,090.23	99,140.73	
	\$4,394,710.63	\$217,884.05	4, 176, 826.58	
Available for Depreciation, Depletion, Federal Income Tax, and Return	\$4,908,024.24	\$219,030.94	\$5,127,055.18	
Tradition for				v

Lone Star Gas Company Public Service Operations

Comparative Statement of Revenues and Expenses	enses		
(Based on 40¢ Domestic Gate Rate)			
Twelve Months Ended December 31st, 1932			
6	er Company Exhibits	Commission Adjustments	As Per Commission 983,698.43
epreciation & Depletion			\$4,143,356.75
vailable for Federal Income Tax and Return			375,116.98
ederal Income Tax		•	\$3,768,239.77
ate Base: (As set out in findings by Commission. See Rate Base Calculation in this report)			\$46,246,617.53 * 8 15
vailable for Return Percent of Rate Base			
ol. 3981] Gross Revenues Gas Sales Miscel. Operating Revenues	\$8,829,713.37 1,491.98 12,192.19	\$8,134.76	\$8,829,713.37 1,491.98 20,326.95
Other Non-Operating itevenues	\$8,843,397.54	\$8,134.76	\$8,851,532.30
Oeductions from Gross Revenues Gas Purchased Production System Expense Gathering System Expense	\$1,177,334.48 68,634.52 135,110.30	\$70,227.30	\$1,247,561.78 68,634.52 135,110.30

\$3,841,055.81 \$230,322.06* \$3,610,733.75 \$5,002,341.73 \$238,456.82 \$5,240,798.55  \$4,253,200.20  \$424,159.22  \$3,829,040.98  \$8,455,136.94  \$8,455,136.94  \$8,455,136.94  \$8,455,136.94  \$8,455,136.94  \$8,455,136.94  \$8,455,136.94  \$8,455,136.94  \$8,455,136.94  \$8,455,136.94  \$8,455,136.94  \$8,455,136.97  \$1,403.52  \$1,130,214.01  \$89,669.36  \$1,219,883.37  \$76,442.91	Transmission System Expense Compressor Station Expense New Business Expense General Expense Uncollectible Bills Taxes—Other than Federal Management Fees and Expenses Regulatory Commission Expense Dry Hole Expense.	454,086.37 358,402.61 87,528.94 689,811.48 5,399.35 343,693.30 87,197.87 163,739.01 14,288.55 255,829.03	87, 197, 87* 151, 316, 47* 56, 347, 38 118, 382, 40*	454,086.37 358,402.61 87,528.94 689,811.48 5,399.35 343,693.30 12,422.54 70,635.93	
\$5,002,341.73 \$238,456.82 \$5,240,798.55 987,598.35 \$4,253,200 20 424,159.22 \$4,253,200 20 424,159.22 \$3,829,040.98 \$3,829,040.98 \$8,455,136.94 \$8.23 \$8,455,136.94 \$8.23 \$8,486,964.15 \$10,011.38 \$8,496,975.53 \$1,130,214.01 \$89,669.36 \$1,219,883.37 \$76,442.91 \$76,442.91	lled & Surrendered Leases	\$3,841,055.81	\$230,322.06*	\$3,610,733.75	
and Return.  See Rate Base Calculation in this report).  \$8,455,136.94  \$8,455,136.94  \$8,486,964.15  \$1,130,214.01  \$1,130,214.01  \$1,130,214.01  \$1,130,214.01  \$1,130,214.01  \$2,135,200.20  \$2,142.91  \$2,153,200.20  \$424,159.22  \$2,33,829,040.98  \$3,829,040.98  \$46,520,137.06  \$40,435.07  \$1,130,214.01  \$1,130,214.01  \$1,130,214.01  \$1,130,214.01  \$2,142.91	Total	\$5,002,341.73	\$238,456.82	\$5,240,798.55 987,598.35	
and Return  and Return  and Return  and Return  and Return  all 159.22  \$3,829,040.98  \$46,520,137.06  \$8.23  \$46,520,137.06  \$8.23  \$8,455,136.94  \$1,403.52  \$0,423.69  \$10,011.38  \$8,455,136.94  \$1,403.52  \$10,011.38  \$8,496,975.53  \$10,412.91  \$1,130,214.01	Depreciation Depletion			\$4 253 200 20	
\$3,829,040.98  \$46,520,137.06  \$46,520,137.06  \$48,455,136.94  \$8,455,136.94  \$1,403.52  \$30,423.69  \$8,486,964.15  \$10,011.38  \$8,496,975.53  \$1,130,214.01  \$89,669.36  \$1,219,883.37  \$76,442.91	e for Federal Income Tax and Return			424,159.22	
ate Base Calculation in this report).  \$8,455,136.94  \$8,455,136.94  \$1,403.52  \$30,423.69  \$10,011.38  \$8,496,975.53  \$10,011.38  \$1,130,214.01  \$1,130,214.01  \$89,669.36  \$1,219,883.37  \$1,130,214.01	Income tax	9	0 0 0 0 0 0	<b>\$3</b> ,829,040.98	
\$8,455,136.94 1,403.52 30,423.69 \$8,486,964.15 \$1,130,214.01 \$1,130,214.01 \$1,219,883.37 \$6,442.91 \$1,219,883.37 \$1,219,883.37	ission. ate Base			\$46,520,137.06 8.23	
\$8,486,964.15 \$10,011.38 \$8,496,975.53 \$1,130,214.01 \$89,669.36 \$1,219,883.37 76,442.91	2] Gross Revenues L. Operating Revenues	\$8,455,136.94 1,403.52 30,423.69	\$10,011.38	\$8,455,136.94 1,403.52 40,435.07	
\$1,130,214.01 \$89,669.36 \$1,219,883.37 76,442.91	Non-Operating revenue	\$8,486,964.15	\$10,011.38	\$8,496,975.53	
Indicates red figures.	ons from Gross Revenues urchased letion System Expense	\$1,130,214.01 76,442.91	\$89,669.36	\$1,219,883.37 76,442.91	2239
	Indicates red figures.				

Lone Star Gas Company
Public Service Operations
Comparative Statement of Revenues and Expenses
(Based on 40¢ Domestic Gate Rate)
Twelve Months Ended June 30th, 1933

		As Per Company	Commission	As Por
		Exhibits	Adjustments	Commission
	Transmission System Expense	127,747.99		127,747.99
	Compressor Station Expense	434,598.91		434,598.91
	New Business Expense	80, 125.79		336, 125. 79
		696,837,61		696,837,61
		4,794.61		4,794.61
	Management Fees and Expenses.	83,693.30	*00 623 60	363,693.30
	Dry Hole Expense	108,735.10	93,645.23*	15,089.87
	Cancelled and Surrendered Leases	208.751.85	54,888.58	70,635.93
	Total		17.000	107,440.00
	Ameliable for D	\$3,676,988.46	\$103,966.38*	\$3,573,022.08
	Depletion, Federal Income Tax, and Return	\$4,809,975.69	\$113,977.76	\$4,923,953,45
	Depreciation and Depletion			00 000 200
	Available for Federal Income Tax and Return			981,029.80
	Federal Income Tox			\$3,926,323.65
				384,733.91
	Available for Keturn			\$3,541,589.74
	· (As set out in findings by Commission. See Rate Base Calculation in this report)			
7	Available for Return Percent of Rate Base.			<b>\$</b> 46,972,794.61
				1

	-		,	· ·							•	+		2	2241
	\$7,688,724.10 1,442.91	35,639.48	4,729,000.49	\$1,182,183.66 86,850.34	131,326.29 431,520.56 338,433.01	716,501.89	360,476.91	17,490.09 68,464.51 172,676.50	\$3.612.250 47	\$4,113,556.02	1,000,017.75	\$3,113,538.27 278.090.32	\$2,835,447.95	\$47,180,440.21	10.9
		\$1,637.99	6. 6.	\$95,598.22			75,940.60	49,302.30* 49,759.99 15,953.42*	\$4,161.89	\$2,523.90*					
•	\$7,688,724.10 1,442.91	\$7,724,168.50		587	431, 520. 29 431, 520. 56 338, 433.01	501.	940.	204.6	\$3,608,088.58	\$4,116,079.92					
(fol 2009)	Gas Sales Miscel. Operating, Revenues Other Non-Operating Revenues	Total	Deductions from Gross Revenues Gas Purchased	Production System Expense Gathering System Expense	Compressor Station Expense New Business Expense	Uncollectible Bills. Taxes—Other than Rederal	Management Fees and Expense Regulatory Commission Expense	Orncelled and Surrendered Leases.	Total	Available for Depreciation, Depletion, Federal Income Tax, and Return	Available for Federal Income Tax and Return.	Federal Income Tax.	Available for Return	(As set out in findings by Commission. See Rate Base Calculation in this report) Available for Return, Percent of Rate Base	* Indicates red figures.

[fol. 3984]

		*		
Lone Star Gas Company	Public Service Operations	Comparative Statement of Revenues and Expenses	(Based on 40¢ Domestic Gate Rate)	Twelve Months Ended March 31st. 1934

Gross Revenues Gas Sales. Miscel. Operating Revenues Other Non-Operating Revenues	As Per Company Exhibits \$7,926,274.88 1,596.78 34,892.25	Commission Adjustments .	As Per Commission \$7,926,274.88 1,596.78 36,503.31
Total	\$7,962,763.91	\$1,611.06	\$7,964.374.97
Deductions from Gross Revenues Gas Purchased Production System Expense Gathering System Expense Transmission System Expense Compressor Station Expense Compressor Station Expense General Expense Uncollectible Bills Taxes—Other than Federal. Management Fees and Expense Regulatory Commission Expense Dry Hole Expense Cancelled and Surrendered Leases	\$1,096,156.08 89,077.98 131,713.95 426,114.97 346,306.81 101,308.68 703,793.31 6,475.73 360,476.91 77,110.16 56,204.18 19,221.57	\$102,004.55 77,110.16* 38,714.09* 49,242.94	\$1,198,160.63 89,077.98 131,713.95 426,114.97 346,306.81 101,308.68 703,793.31 6,475.73 360,476.91 17,490.09 68,464.51 172,676.50
Total	<b>\$</b> 3,583,322.42	\$38,737.65	\$3,622,060.07
Available for Denreciation Denletion Federal Income Tax and Return	\$4 379 441 49	£37 196 50*	£4 342 314 00

	4.9	ALTO MANAGEMENT
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Depreciation and Depletion	•	1,001,440.56	
Available for Federal Income Tax and Return		\$3,340,874.34	
Federal Income Tax		311.929.74	-
Available for Return		\$3,028,944.60	
Rate Base: (As set out in findings by Commission. See Rate Base Calculation in this report).		\$47,192,765.79	
Available for Return, Percent of Rate Base		6.42	

· • Indicates red figures.

Summary of Rate Base Calculations For Periods Shown Below

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	fol 3085

Rate Base to cover Public Service Promerty and	business of Lone Star Gas Co., at December 31st, 1931, as determined by Railroad Commission and referred to on Page 71 of printed Opinion and Order dated 9/13/33.	Cost of physical property acquired by Company from Southern Oil Production Co., as of October 1st, 1939, and referred to the Doin 750.	of printed Opinion and Order of Railroad Commission dated 9/13/33. Proportionate amount applicable by periods. Unamortized Regulatory Commission Expense	as referred to on Page 79 of Printed Opinion and Order of Railroad Commission dated 9/13/33. Proportionate amount applicable by periods.	Rate Base—By Periods:  Arrived at in same manner as used by Commission for December 31st, 1932 and set out on Page 79 of their Opinion and Order dated 9/13/53.
December 31st, 1931	\$46,246,617.53				\$46,246,617.53
December 31st, December 31st, 1931			191,650.03	81,869.50	\$46,520,137.06
June 30th, 1933	\$46,246,617.53 \$46,246.617.53 \$46.246.617.53 \$46.246.617.53		574,950.08	151,227.00	\$46,246,617.53 \$46,520,137.06 \$46,972,794.61 \$47,180,440.21 \$47,192,765.79
December 31st, 1933	\$46.246.617.53		766,600.11	167, 222.57	\$47,180,440.21
March 31st, 1934	<b>2</b> 46 946 617 53		766,600.11	179,548.15	\$47,192,765.79

							22
24 6 946 617 ED	00.010,017,040	\$46,246,617.53 191,650.03	\$46.520.137.06	\$46,246,617.53			151,227.00
	\	\$766,600.11 \$163,739.01		\$766,600.11	\$163,739.01 18,633.81	\$145,105.20 8,789.13 2,667.33	\$6,121.80
December 31st, 1931  Total Rate Base as shown on Page 71 of printed Opinion and Order of Railroad Commission.	1932 December 31st, 193	Plus: Cost of physical property acquired by Company from Southern Oil Production Co., as of October 1st, 1932, and referred to on Page 79 of printed Opinion and Order of Railroad Comm. One fourth applicable to this period.  Regulatory Expense capitalized for 1932, as set out on Page 79 of printed Opinion and Order of R. R. Commission.  One half applicable to this period.	Rate Base December 31st, 1932 as found by Railroad Commission and set out on Page 79 of printed Opinion and Order	June 30th, 1933 Rate Base December 31st, 1931 as found by Railroad Commission Plus: Cost of physical property acquired by Company from Southern Oil Production Company as of October 1st, 1932 and referred to on Page 79 of printed Opinion and Order of R. R. Commission Three-fourth applicable to this period Regulatory Expense capitalized:	Capitalized for 1932.  Less written off for 1932.  6,211.27	Applicable for One Year.  Incurred and capitalized during first 6 mos. 1933.  One-fourth applicable to this period  Less written off for 1933—1/2 year.	Unamortized at June 30th, 1933.

Rate Base Calculations

[fol. 3986]

[fol. 3987] * Rate Base Calculations—(Con.)	
June 30th, 1933—(Con.) Rate Base June 30th, 1933, arrived at in same manner as used by Commission for December 31st, 1932 and set out on Page 79 of their Opinion and Order	\$46,972,794.61
December 31st, 1933 Rate Base December 31st, 1931 as found by Railroad Commission. Rate Base December 31st, 1931 as found by Company from Southern Oil Production Company as of Phys. Cost of physical property acquired by Company from Southern Oil Production Company as of \$766,600.11	\$46,
October 1st, 1932, and referred to on rage as or princed All applicable to this period  All applicable to this period  Regulatory Commission Expense: Capitalized for the year 1932  Charged Off 1932  Charged Off 1932	.01
st, 1933 \$166,792.39 slis period.	. 93
1	3.64 167,222.57
Rate Base December 31st, 1933, arrived at in same manner as used by Commission for December 31st, 1932, and set out on Page 79 of their Opinion and Order	\$47,180,440.21
March 31st, 1934  Rate Base December 31st, 1931 as found by Railroad Commission  Rate Base December 31st, 1931 as found by Company from Southern Oil Production Co., as of Plus: Cost of physical property acquired by Company from Southern Oil Production Co., as of October 1st, 1932, and referred to on Page 79 of printed Opinion and Order of Railroad Commission  All applicable to this period	\$46,246,617.53 0.11 766,600.11

	2,422.54	\$163,739.01	
" " 1934—14 yr.	12,422.54 3,105.63	27,950.71	
Unamortized at March 31st, 1934		\$135,788.30	
	\$66,792.39	\$50,094.29	
Chgd. off 107 1855.	1,266.89	6,334.44	
Unamortized at March 31st, 1934.		\$43,759.85	\$179,548.45

	[fol. 3989] Depreciation and Depletion Allowances	
	Twelve Months Ended December 31st, 1931	
	Depreciation:	
	Amount allowed by Commission and set	
	out on Page 69 of their Opinion and Order dated September 13th, 1933	\$968,066.98
	Depletion:	
	Amount allowed by Commission and set out on Page 76 of their Opinion and Order dated September 13th, 1933	15,631.45
	Total	\$983,698.43
	Twelve Months Ended December 31st, 1932	,
	Depreciation:	
	Rate Base as found by Commission \$46,520,137.06 Depreciation rate as shown on Page 80	
*	of Commission's Opinion & Order 2.09%	
	Commission Allowance	\$972,270.86
	Depletion:	
	Amount allowed by Commission and set out on Page 76 of their Opinion and	
	Order dated Sept. 13th, 1933	15,327.49
	. Total	\$987,598.35
	Twelve Months Ended June 30th, 1933	
	Depreciation:	
		añ .
	port, \$46,972,794.61	
	Depreciation rate as shown on Page 80 of Commission Opinion & Order 2.09% Allowance based on finding by Commis-	
	sion	\$981,731.41
	Depletion:	
	Total gas produced—M. Cu. Ft 5,724,506 Less 1/8 Royalty	
	Net Gas produced	
	Depletion Rate per MCF, as shown on Page 76 of Commission Opinion &	
	Order	
	sion	15,898.39
	Total	\$997,629.80
	[fol. 3990]	4001,020.00
	Twelve Months Ended December 31st, 1933	
	Depreciation;	
	Rate Base—Calculated in same manner	
	as used by Commission—See Rate Base Calculation included in this re-	
	port\$47,180,440.21	×-

Depreciation rate as shown on Page 80 of Commission's Opinion and Order Allowance based on finding by Commis- sion	2.09%	\$986,071.20
Depletion:		
Total gas produced—M. Cu. Ft Less 1/8 Royalty	627,714	
Net gas produced		
sion		13,946:55
		-
Twelve Months Ended March 31st, 1934		
Depreciation:  Rate Base—Calculated in same manner as used by Commission—See Rate		
Base Calculation included in this re-	\$47 192 765 79	
port  Depreciation rate as shown on Page 80 of Commission Opinion and Order	2.09%	
Allowance based on finding by Commission.	, ,	
Depletion:		,
Total gas produced—M. Cu. Ft Less 1/8 Royalty	5,441,266 680,158	
Net gas produced  Depletion rate per MCF as shown on Page 76 of Commission Opinion & Order  Allowance based on finding by Commission	\$.003174	15,111.76
Total		\$1,001,440.56
[fol. 3991] Federal Income Tax C	alculation	, ,
Twelve Months Ended December 31st, 1931		
Amount Available for Federal Income Tax an Return		
Less—Interest Charges	. 1,017,381.94	
Balance—Subject to Fed. Income Tax	129	% \$375,116.98
Twelve Months Ended December 31st, 1932		
Amount Available for Federal Income Tax an Return. Less—Interest Charges	. \$4,253,200.20	
		1
Balance—Subject to Fed. Income Tax Federal Income Tax Rate Federal Income Tax.	. 13.75	% \$424,159.22
141—3104 ··.	************	VILT, 109. 22
141-0104 ".		

Twelve Months Ended June 30th, 1933		*
	1	
Federal Income Tax Rate	13 75%	<b>\$</b> 384,733.91
Twelve Months Ended December 31st, 1933		
Amount Available for Federal Income Tax and Return	\$3,113,538.27 1,091,063.20	
Federal Income Tax Rate	13.75%	\$278,090.32
Twelve Months Ended March 31st, 1934		
Amount Available for Federal Income Tax and Return  Less—Interest Charges	\$3,340,874.34 1,072,294.43	
Federal Income Tax Rate	13.75%	<b>\$</b> 311,929.74
	Return Less—Interest Charges  Balance—Subject to Fed. Income Tax Federal Income Tax Rate Federal Income Tax  Twelve Months Ended December 31st, 1933 Amount Available for Federal Income Tax and Return Less—Interest Charges  Balance—Subject to Fed. Income Tax Federal Income Tax Rate Federal Income Tax  Twelve Months Ended March 31st, 1934 Amount Available for Federal Income Tax and Return Less—Interest Charges  Balance—Subject to Fed. Income Tax Federal Income Tax Rate	Amount Available for Federal Income Tax and Return

[fol. 3992]

### Section No. 2

Basis of Calculations Included in Schedules Incorporated in This Section of Report

### 1. Gas Sales:

Based on 40¢ Domestic Gate Rate.

### 2. Rate Base:

As found by Railroad Commission at December 31st, 1931 and set out in their Opinion and Order dated September 13th, 1933, plus net additions at cost.

### 3. Operating Expenses:

Based on findings by Railroad Commission and as set out in their Opinion and Order dated September 13th, 1933, with the exception that additional gas purchase expense allowed by Commission has been eliminated from schedules. The reason for this elimination of expense is due to the inclusion of property formerly owned and operated by Meridian Gas Company being included in Rate Base as a net addition to property.

### 4. Depreciation and Depletion:

Based on findings by Railroad Commission and as set out in their Opinion and Order dated September 13th, 1933.

### 5. Federal Income Tax:

Based on amount available for return as shown in schedules, less interest charges paid by the Company. The remainder being used as the basis of calculation at the prevailing rate.

Lone Star Gas Company Public Service Operations

Statement of Revenues, Expenses, and Amount Available for Return

In Same Manner as Used by Commission and Set Out in Their Opinion and Order Dated September 13th, 1933) (Based on 40¢ Domestic Gate Rate and Operating Expenses, Depreciation, and Depletion Calculated

Rate Base—As Found by Commission at December 31st, 1931, Plus Net Additions at Cost For Periods Shown Below

### Twelve Months Ended

Gross Revenues:	December 31st, 1931	December 31st, 1932	June 30th, 1933	December 31st, 1933	March 31st, 1934
Gas Sales. Misc'l. Operating Revenues. Other Non-Operating Revenues.	\$9,265,639:45 1,631.35 36,610.96	\$8,829,713.37 1,491.98 20,326.95	\$8,455,136.94. 1,403.52 40,435.07	\$7,688,724.10 1,442.91 35,639.48	\$7,926,274.88 1,596.78 36,503.31
Total	\$9,303,881.76	\$8,851,532.30	\$8,496,975.53	\$7,725,806.49	\$7,964,374.97
Deductions from Gross Revenues:					
Gas Purchased	\$1,456,830.39	\$1,177,334.48	\$1,130,214.01	\$1,086,587.44	\$1,096,156.08
Production System Expense	699,	634	,442.	850	,077
Gathering System Expense	,961	,110.	.TAT.	326	,713.
Transmission System Expense.	,115.	.086	588.	520	114.
Compressor Station Expense	292	402	,125	433	306
New Business Expense	,125.	528	,725.	793	308
General Expense	,163.	811.	.837	.501.	.793.
Uncollectible Bills.	.369	399	794	530	.475.
Taxes—Other than Federal	,008	693	693	476	,476.
Management Fees & Expenses	200	100	000	. 604	
Dry Hole Expense	453	625	625	480	464
Cancelled and Surrendered Leases.	99,140.73	137,446.63	137,446.63	172,676.50	172,676.50
Total.	\$4,176,826.58	. \$3,540,506.45	\$3,483,352.72	\$3,516,652.25	\$3,520,055.52

Available for Depreciation. Depletion, Federal In-					
come Tax, and Return. Depreciation and Depletion.	\$5,127,055.18 983,698.43	\$5,311,025.85 1,029,067.35	\$5,013,622.81 1,027,294.20	\$4,209,154.24 1,023,560.63	\$4,444,319.45 1,025,472.71
Available for Federal Income Tax and Return	\$4,143,356.75 375,116.98	\$4,281,958.50	\$3,986,328.61. 392,984.60	<b>\$</b> 3,185,593.61 287,997.93	\$3,418,846.74 322,650.94
Available for Return	\$3,768,239.77	\$3,853,845.01	\$3,593,344.01	\$2,897,595.68	\$3,096,195.80
Rate Base—As found by Commission at December 31st, 1931, plus net additions at cost. (See Rate Base Calculation included in this report).		\$46,246,617.53 \$48,504,299.60 \$48,393,005.16 \$48,306,893.96 \$48,342.628.99	\$48,393,005.16	\$48,306,893.96	\$48,342,628.99
Available for Return Per Cent of Rate Base.	8.15	8.15 7.94	7.42	5.98	6.41

		Defends	ant's	Defendant's Exhibit No. 13—Continued	13—(	Continued	,		-
[fol. 3994]		*	Lo P	Lone Star Gas Company	mpany				
		Comparate (E. Rate Decembe Twelv	ttive Sta Based o e Base- er 31st, ve Mon	Comparative Statement of Revenues and Expenses (Based on 40¢ Domestic Gate Rate)  Rate Base—As Found by Commission at December 31st, 1931—Plus Net Additions at Cost Twelve Months Ended December 31st, 1931	enues ar Commis t Additis	ad Expenses tate) sion at ons at Cost ones, 1931			
Gross Revenues Gas Sales. Miscellaneous Operating Revenues Other Non-Operating Revenues	s Revenues Gas Sales Miscellaneous Operating Revenues. Other Non-Operating Revenues.					As Per Company Exhibits \$9,265,639.45 1,631.35 35,464.07	Commission Adjustments	As Per Commission \$9,265,639.45 1,631.35 36,610.96	
Total			•		:	\$9,302,734.87	\$1,146.89	\$9,303,881.76	
Deductions from Gross Revenues Gas Purchased	Revenues		•			C1 456 820 20		000 047	
Production System Expense	Expense.				: : :	90,669.82		\$1,456,830.39 90,669.82 140.961.00	
Transmission System Exper Compressor Station Expens	em Expense					115		584,115.01 447 202 41	
New Business Expense General Expense	ense					126, 125.98		126,125,98	
Uncollectible Bills.  Taxes—Other than Federal	Federal		:			4,369.63		4,369.63	
latory Commi	& Expenses				::	91,375.38	91,375.38†	399,008.95	
Dry Hole Expense Cancelled & Surrendered Le	ndered Leases.				: .: :	65,871.56 239,230.96	13,581.56	79,453.12 99,140.73	
Total					:	\$4,394,710.63	\$217,884.05	\$4,176,826.58	

Available for Depreciation, Depletion, Federal Income Tax and Return	\$4,908,024.24	\$219,030.94	\$5,127,055.18
Depreciation & Depletion.		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	983,698.43
Available for Federal Income Tax and Return			\$4,143,356.75
Federal Income Tax			375,116.98
Available for Return		*	\$3,768,239.77
Rate Base:			
As found by Commission at December 31st, 1931—Plus Net Addition at Cost. (See Rate Base Calculation included in this report).	••••••		\$46,246,617.53
Available for Return Per Cent of Rete Rese			
Total of transfer page.			8.15
† Red in copy.			

Defendant's Exhibit No. 13—Continued	-Continued		
[fol. 3995]  Lone Star Gas Company Public Service Operations Comparative Statement of Revenues and Expenses (Based on 40¢ Domestic Gate Rate) Rate Base—As Found by Commission at	s and Expenses Rate) ission at		
December 31st, 1931—Plus Net Additions at Cost Twelve Months Ended December 31st, 1932	tions at Cost 31st, 1932		
Gross Revenues Gas Sales Misc'l. Operating Revenues Other Non-Operating Revenues	As Per Company Exhibits \$8,829,713.37 1,491.98 12,192.19	Commission Adjustments \$8,134.76	As Per Commission \$8,829,713.37 1,491.98 20,326.95
Total	\$8,843,397.54	8,134.76	\$8,851,532.30
Deductions from Gross Revenues		With the state of	
Production System Expense	\$1,177,334.48		\$1,177,334.48
Cathering System Expense.	135,110.30		135 110 30
Compressor Station Expense	454,086.37		454,086.37
New Business Expense	87 598 94		358,402.61
Ceneral Expense. Uncollectible Bills	689,811.48		689,811.48
Taxes—Other than Federal	343,693,30		5,399.35
Regulatory Commission France	87,197.87	87,197.87†	00.000,000
Dry Hole Expense	163,739.01	151,316.47†	12,422.54
Cancelled & Surrendered Leases.	255,829.03	118,382.40†	137,446.63
Total	\$3,841,055.81	\$300,549.36	\$3,540,506.45
	Control of the Contro		The second secon

Available for Depreciation, Depletion, Federal Income Tax and Return.	\$5,002,341.73	\$308,684.12	\$5,311,025.85	
Depreciation and Depletion			1,029,067,35	
Available for Federal Income Tax and Return			64 391 059 50	٠
federal Income Tax.			498 119 40	
Available for Return.			428,116.49	,
Rate Base:			<b>5</b> 3,853,845.01	٠
As found by Commission at December 31st, 1931—Plus Net Addition at Cost. (See Rate Base Calculation included in this report)			\$48 504 999 60	
Available for Return			20,000	
Fer Cent of Rate Base			7.94	
T Ked in copy.				

-Continued	<b>.</b>	and Expenses 9. Rate) nission at litions at Cost th, 1933	As Per Company Commission As Per Exhibits Adjustments Commission 88,455,136,94 \$8,455,136,94 \$1,403.52 \$30,423.69 \$10,011.38 \$40,435.07	\$8,486,964.15 \$10,011.38 \$8,496,975.53	\$1,130,214.01 76,442.91 127,747.99 434,598.91 336,125.79 89,725.16 696,837.61 696,837.61 696,837.61 696,837.61 83,578.88 83,573.88 108,735.10 15,747.39 89,725.16 696,837.61 4,794.61 363,693.30 83,578.88 15,785.10 15,785.10 15,785.10 15,785.10 15,785.10 15,786.63 16,635.93 70,635.93
Defendant's Exhibit No. 13—Continued	Lone Star-Gas Company	Comparative Statement of Revenues and Expenses (Based on 40¢ Domestic Gate Rate) Rate Base—As Found by Commission at December 31st, 1931—Plus Net Additions at Cost Twelve Months Ended June 30th, 1933	Gross Revenues Gas Sales Misc'l. Operating Revenues Other Non-Operating Revenues	Total	Cas Purchased Cas Purchased Production System Expense Gathering System Expense Gathering System Expense Transmission System Expense Compressor Station Expense New Business Expense General Expense Uncollectible Bills Taxes—Other than Federal Management Fees & Expenses Regulatory Commission Expense Dry Hole Expense Cancelled and Surrendered Leases Total

Available for Depreciation, Dapletion, Federal Income Tax and Return	\$4,809,975.69	\$203.647.12	\$5 013 622 81	
Depreciation and Depletion			1.027.294.20	
Available for Federal Income Tax and Return.	:		\$3,986,328.61	
Federal Income Tax		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	392,984.60	
Available for Return.			\$3,593,344.01	-
As found by Commission at December 31st, 1931—Plus Net Addition at Cost. (See Rate Base Calculation included in this report)				
Available for Return			<b>\$48</b> , 393, 005. 16	
Per Cent of Rate Base.			7.42	
† Ked in copy.				

Defendant's Exhibit No. 13—Continued	13—Continued			
[fol. 3997]  Lone Star Gas Company Public Service Operations Comparative Statement of Revenues and Expenses	pany tions Tropheses			
(Based on 40¢ Domestic Gate Rate) Rate Base—As Found by Commission at December 31st, 1931—Plus Net Additions at Cost Twelve Months Ended December 31st, 1933	Gate Rate) ommission at Additions at Cost aber 31st, 1933			
Gross Revenues Gas Sales Misc'l. Operating Revenues Other Non-Operating Revenues	As Per Company Exhibits \$7,688,724.10 1,442.91 34,001.49	Commission Adjustments 1,637.99	*As Per Commission \$7,688,724.10 *1,442.91 35,639.48	
.Total.	\$7,724,168.50	\$1,637.99	\$7,725,806.49	
Deductions from Gross Revenues Gas Purchased Production System Expense Gathering System Expense Transmission System Expense Compressor Station Expense New Business Expense Onnollectible Bills Taxes—Other than Federal Management Fees & Expenses Regulatory Commission Expense Dry Hole Expense Cancelled & Surrendered Leases	\$1,086,587.44 86,850.34 131,326.29 431,520.56 338,433.01 99,793.94 716,501.89 6,530.77 360,476.91 75,940.60 66,792.39 18,704.52 188,629.92	75 940 60† 49,302 30† 49,759 99 15,953 42†	\$1,086,587.44 86,850.34 131,326.29 431,520.56 338,433.01 99,793.94 716,501.89 6,530.77 360,476.91 17,490.09 68,464.51 172,676.50	
Total	\$3,608,088.58	\$91,436.33†	\$3,516,652.25	

vailable for Depreciation, Depletion, Federal Income Tax and Return	\$4,116,079.92	\$93,074.32	\$4,209,154.24
Depreciation and Depletion			1,023,560.63
vailable for Federal Insome Tax and Return			\$3,185,593.61
ederal Income Tax.			287,997.93
vailable for Return.			\$2,897,595.68
ate Base:			
As found by Commission at December 31st, 1931—Plus Net Addition at Cost. (See Rate Base Calculation included in this report)			\$48,306,893.96
vailable for Return Per Cent of Rate Base.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		5.98

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Public Service Operations

Comparative Statement of Revenues and Expenses
(Based on 40¢ Domestic Gate Rate)

Rate Base—As Found by Commission at
December 31st, 1931—Plus Net Additions at Cost

Twelve Months Ended March 31st, 1934

Gross Revenues Gas Sales Misc'l. Operating Revenues Other Non-Operating Revenues	As Per Company Exhibits \$7,926,274.88 1,596.78 34,892.25	Commission Adjustments	As Per Commission \$7,926,274.88 1,596,78 36,503.31
Total	\$7,962,763.91	\$1,611.06	\$7,964,374.97
Deductions from Gross Revenues			
Production System Expenses.	\$1,096,156.08		156
Cathering System Expense	131,713.95		131,713,95
Compressor Station Expense	426,114.97		114
New Business Expense.	101 208 69		388
General Expense	703, 793.31		208
Taxes—Other than Rederal	6,475.73		475
Management Fees & Expenses.	77 110 16	77 110 164	360,476.91
Regulatory Commission Expense.	56, 204. 18	38,714.09	17.490.09
Cancelled and Surrendered Leases.	19,221.57	49,242.94	68,464.51 172,676.50
Total	\$3,583,322.42	\$63,266.90†	\$3,520,055.52
		-	

Available for Depreciation, Depletion, Federal Income Tax and Return	\$4,379,441.49	\$64,877.96	\$4,444,319.45
Depreciation & Depletion			1,025,472.71
Available for Federal Income Tax and Return			\$3,418,846.74
reueral Income Lax			322,650.94
Available for ReturnRate Base:			\$3,096,195.80
As found by Commission at December 31st, 1931—Plus Net Addition at			i
de for Detreme			\$48,342,628.99
Per Cent of Rate Base.			6.41
† Red in copy.			

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Property and at December 31st, 1931 at December 71 of printed \$46,246,617.53 at re- 47,776,749.63 by books at 47,776,749.63			
at December alroad Com- 71 of printed books at re- by books at	2 31st, June 30th, 1933	December 31st, 1933	March 31st, 1934
books at re- 47,776,749.63 by books at 47,776,749.63	617.53 \$46,246,617.5	3 \$46,246,617.53	\$46,246,617.5
47,776,749.63	50,034,431.70 49,923,137.26 49,837,026.06 49,872,761.09	6 49,837,026.06	49,872,761.0
•	47,776,749.63 47,776,749.63	3 47,776,749.63	47,776,749.63
22,231,082.Uf	682.07 \$2,146,387.63	3 \$2,060,276.43	\$2,096,011.46
Rate Base by periods, which is Rate Base determined by Railroad Commission at December 31st, 1931, plus net additions at cost \$46,246,617.53 \$48,504,299.60 \$48,393,005.16 \$48,306,893.96 \$48,342,628.99	299.60 \$48,393,005.1	6 \$48,306,893.96	\$48,342,628.9

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Defendant'

marysis of Met Additions for Feriods Shown Below	ns for Periods Shov	vn Below			
That is with retail Direct Continued	Dec. 31st, 1932	June 30th, 1933	Dec. 31st, 1933	March 31st, 1934	
Production System Property	\$200,000.00		\$200,000.00	\$200,000	
Gathering & Transmission System Prop.	1,326,416.12		1.311.453.95	524,059	
Automobile Equipment	29.488.52+	9,527.08	20,112.44	14,968	
Dallas Machine Shop.	756.28		1,410.88	1.618	
Gas Connections	8,929.40†		17,775.18	17,098	
General Office Building & Equipment General Office-Furniture & Fixtures	22,719.31		28,445.45	28,451.	
Real Estate. Telenhone System	101	678	3,359.90	3,359	
Tools and Construction Equipment	1,177.00	22,547.39 1,236.02	22,328.65	22,378.29	
Total	\$2,257,682.07	\$2,146,387.63	\$2,060,276.43	\$2.096.011.46	
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[fol. 4001] Depreciation and Deplet	ion Allowances	
Twelve Months Ended December 31st, 1931		
Depreciation: ,  Amount allowed by Commission and set		
out on Page 69 of their Opinion and		
Order dated September 13th, 1933		\$968,066.98
Depletion:		
Amount allowed by Commission and set		
out on Page 76 of their Opinion and Order dated September 13th, 1933		15,631.45
	**	
Total	• • • • • • • • • • • • • • • • • • • •	\$983,698.43
Twelve Months Ended December 31st, 1932	**	
Depreciation:		
Rate Base as found by Commission at December 31st, 1931	248 948 817 E2	
Plus Net Additions at Cost	2,257,682.07	
Total	\$48,504,299.60	
Depreciation Rate as shown on Page 80 of Commission's Opinion and Order	2.09%	
Allowance Based on Commission Rate:	2.0976	\$1,013,739.86
Depletion:	F 4	
Amount allowed by Commission and set		
out on Page 76 of their Opinion and	9	
Order dated September 13th, 1933	* * * * * * * * * * * * * * * * * * * *	15,327.49
Total		\$1,029,067.35
Twelve Months Ended June 30th, 1933 Depreciation:		
Rate Base as found by Commission at	* *	
December 31st, 1931	\$46,246,617,53	
'Plus Net Additions at Cost	2,146,387.63	
Total	\$48,393,005,16	*.
Depreciation Rate as shown on Page 80		
of Commission's Opinion and Order.	2.09%	
Allowance Based on Commission Rate		\$1,011,395.81
[fol. 4002]		
Depreciation—(Brought Forward)		\$1,011,395.81
Depletion:		
Total gas produced—M. Cu. Ft	5.724.506	6.
Less 1/8 Royalty	715,563	
Net Gas produced	5,008,943	
Depletion Rate per MCF, as shown on	1	
Page 76 of Commission Opinion and		
Order	\$.003174	
Allowance based on Commission Rate.		15,898.39
Total		\$1,027,294.20
- Au		

Twelve Months Ended December 31st, 1933		
Depreciation:		
Rate Base as found by Commission at		
December 31st, 1931		. /
Plus—Net Addition at Cost	2,060,276.43	
- Total	\$48,306,893.96	
Depreciation Rate as shown on Page 80		
of Commission's Opinion and Order Allowance based on Commission Rate	2.09%	e1 000 614 00
the wanter based on Commission Rate		\$1,009,614.08
Depletion:		
Total Gas produced—M. Cu. Ft	F 001 W14	
Less 1/8 Royalty	$5,021,714 \\ 627,714$	
Net Ges produced	4 204 000	
Net Gas produced  Depletion Rate per MCF as shown on Page 76 of Commission Opinion & Order	4,394,000	
Page 76 of Commission Onion	- 1	
Order to of Commission Opinion &		
Allowanas Dandan Canada D	\$.003174	10 000 000
Allowance Based on Commission Rate		13,946.55
Total		** ***
Total		\$1,023,560.63
fol. 4003]		
,		
Twelve Months Ended March 31st, 1934		
Depreciation:		
Rate Base as found by Commission at		
December 31st 1021	246 046 617 FO	
December 31st. 1931	\$46,246,617.53	
December 31st, 1931	\$46,246,617.53 2,096,011.46	
December 31st, 1931	2,096,011.46	
December 31st. 1931	2,096,011.46	
December 31st, 1931 Plus Net Additions at Cost - Total.	2,096,011.46	
December 31st, 1931. Plus Net Additions at Cost  Total  Depreciation Rate as shown on Page 80	\$48,342,628.99	•
December 31st, 1931. Plus Net Additions at Cost  Total  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order	2,096,011.46 \$48,342,628.99	
December 31st, 1931. Plus Net Additions at Cost  Total  Depreciation Rate as shown on Page 80	2,096,011.46 \$48,342,628.99	<b>\$</b> 1,010,360.95
December 31st, 1931. Plus Net Additions at Cost.  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate	2,096,011.46 \$48,342,628.99	
December 31st, 1931. Plus Net Additions at Cost	2,096,011.46 \$48,342,628.99 2.09%	
December 31st, 1931  Plus Net Additions at Cost  Total  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order  Allowance Based on Commission Rate  Depletion:  Total Gas produced—M. Cu. Ft.	2,096,011.46 \$48,342,628.99 2.09%	
December 31st, 1931. Plus Net Additions at Cost	2,096,011.46 \$48,342,628.99 2.09%	
December 31st, 1931 Plus Net Additions at Cost  Total  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158	
December 31st, 1931. Plus Net Additions at Cost.  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty.  Net Gas Produced.	2,096,011.46 \$48,342,628.99 2.09%	
December 31st, 1931. Plus Net Additions at Cost.  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty.  Net Gas Produced.	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158	
December 31st, 1931. Plus Net Additions at Cost.  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty.  Net Gas Produced. Depletion Rate per MCF as shown on Page 76 of Commission Opinion and	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108	
December 31st, 1931 Plus Net Additions at Cost  Total  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order Allowance Based on Commission Rate  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty  Net Gas Produced Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108	\$1,010,360.95
December 31st, 1931. Plus Net Additions at Cost.  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty.  Net Gas Produced. Depletion Rate per MCF as shown on Page 76 of Commission Opinion and	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108	
December 31st, 1931 Plus Net Additions at Cost  Total  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order Allowance Based on Commission Rate  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty  Net Gas Produced Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order  Allowance Based on Commission Rate	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108 \$.003174	\$1,010,360.95 15,111.76
December 31st, 1931 Plus Net Additions at Cost  Total  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order Allowance Based on Commission Rate  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty  Net Gas Produced Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order  Allowance Based on Commission Rate	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108	\$1,010,360.95
December 31st, 1931 Plus Net Additions at Cost  Total  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order Allowance Based on Commission Rate  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty  Net Gas Produced Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order  Allowance Based on Commission Rate	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108 \$.003174	\$1,010,360.95 15,111.76
December 31st, 1931 Plus Net Additions at Cost  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty.  Net Gas Produced. Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order.  Allowance Based on Commission Rate  Total.	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108 \$.003174	\$1,010,360.95 15,111.76
December 31st, 1931 Plus Net Additions at Cost  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty  Net Gas Produced Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order. Allowance Based on Commission Rate.  Total.	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108 \$.003174	\$1,010,360.95 15,111.76
December 31st, 1931 Plus Net Additions at Cost  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty  Net Gas Produced Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order. Allowance Based on Commission Rate.  Total.	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108 \$.003174	\$1,010,360.95 15,111.76
December 31st, 1931 Plus Net Additions at Cost  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty.  Net Gas Produced. Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order. Allowance Based on Commission Rate.  Total.  Total.  ol. 4004] Federal Income Tax Calvelle Months Ended December 31st, 1931	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108 \$.003174	\$1,010,360.95 15,111.76
December 31st, 1931 Plus Net Additions at Cost  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty  Net Gas Produced Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order. Allowance Based on Commission Rate.  Total  ol. 4004] Federal Income Tax Commission Rate Total  welve Months Ended December 31st, 1931 Amount Available for Federal Income Tax	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108 \$.003174	\$1,010,360.95 15,111.76
December 31st, 1931 Plus Net Additions at Cost  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty  Net Gas Produced Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order. Allowance Based on Commission Rate.  Total  ol. 4004] Federal Income Tax Commission Rate Total  welve Months Ended December 31st, 1931 Amount Available for Federal Income Tax	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108 \$.003174	\$1,010,360.95 15,111.76
December 31st, 1931 Plus Net Additions at Cost  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty.  Net Gas Produced. Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order.  Allowance Based on Commission Rate.  Total.  ol. 4004] Federal Income Tax C. welve Months Ended December 31st, 1931 Amount Available for Federal Income Tand Return. Less—Interest Charges.	2,096,011.46 \$48,342,628.99  2.09%  5,441,266 680,158  4,761,108  \$.003174  alculations  ax \$4,143,356.75 1,017,381.94	\$1,010,360.95 15,111.76
December 31st, 1931 Plus Net Additions at Cost  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty.  Net Gas Produced. Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order.  Allowance Based on Commission Rate.  Total.  ol. 4004] Federal Income Tax C. welve Months Ended December 31st, 1931 Amount Available for Federal Income Tand Return. Less—Interest Charges.	2,096,011.46 \$48,342,628.99  2.09%  5,441,266 680,158  4,761,108  \$.003174  alculations  ax \$4,143,356.75 1,017,381.94	\$1,010,360.95 15,111.76
December 31st, 1931 Plus Net Additions at Coat  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty  Net Gas Produced Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order. Allowance Based on Commission Rate.  Total.  Total  ol. 4004] Federal Income Tax Commission Rate.  Total  welve Months Ended December 31st, 1931 Amount Available for Federal Income Tax and Return Less—Interest Charges  Balance—Subject to Federal Income Tax Enderal	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108 \$.003174 alculations ax. \$4,143,356.75 1,017,381.94 \$3,125,974.81	\$1,010,360.95 15,111.76 \$1,025,472.71
December 31st, 1931 Plus Net Additions at Cost  Total.  Depreciation Rate as shown on Page 80 of Commission's Opinion and Order. Allowance Based on Commission Rate.  Depletion: Total Gas produced—M. Cu. Ft. Less 1/8 Royalty.  Net Gas Produced. Depletion Rate per MCF as shown on Page 76 of Commission Opinion and Order.  Allowance Based on Commission Rate.  Total.  ol. 4004] Federal Income Tax C. welve Months Ended December 31st, 1931 Amount Available for Federal Income Tand Return. Less—Interest Charges.	2,096,011.46 \$48,342,628.99 2.09% 5,441,266 680,158 4,761,108 \$.003174 alculations ax. \$4,143,356.75 1,017,381.94 \$3,125,974.81	\$1,010,360.95 15,111.76 \$1,025,472.71

Twelve Months Ended December 31st, 1932  Amount Available for Federal Income Tax and Return  Less—Interest Charges	\$4.281,958.50	
Balance—Subject to Federal Income Tax Federal Income Tax Rate Federal Income Tax	\$3,113,552.64 13.75%	<b>\$</b> 428,113.49
Twelve Months Ended June 30th, 1933  Amount Available for Federal Income Tax and Return  Less—Interest Charges	\$3,986,328.61 1,128,258.82	
Balance—Subject to Federal Income Tax. Federal Income Tax Rate Federal Income Tax.	13.75%	\$392,984.60
Twelve Months Ended December 31st, 1933  Amount Available for Federal Income Tax and Return Less Interest Charges	\$3,185,593.61 1,091,063.20	* .
Balance—Subject to Federal Income Tax Federal Income Tax Rate Federal Income Tax	13.75%	\$287,997.93
Twelve Months Ended March 31st, 1934 Amount Available for Federal Income Tax		,
and ReturnLess—Interest Charges	1,072,294.43	
Balance—Subject to Federal Income Tax. Federal Income Tax Rate. Federal Income Tax.	13.75%	<b>\$322</b> ,650.94

[fol. 4005]

Section No. 3

Basis of Calculations Included in Schedules Incorporated in This Section of Report

## 1. Gas Sales:

Based on 32¢ Domestic Gate Rate.

## 2. Rate Base:

Based on findings by Railroad Commission and as set out in their Opinion and Order dated September 13th, 1933.

## 3. Operating Expenses:

Based on findings by Railroad Commission and as set out in their Opinion and Order dated September 13th, 1933.

## 4. Depreciation and Depletion:

Based on findings by Railroad Commission and as set out in their Opinion and Order dated September 13th, 1933.

## 5. Federal Income Tax:

Based on amount available for return, as shown in schedules, less interest charges paid by the Company; the remainder being used as the basis of calculation at the prevailing rate.

[fol. 4006]

Lone Star Gas Company

Public Service Operations

Statement of Revenues, Expenses, and Amount Available for Return

(Based on 32¢ Domestic Gate Rate and Operating Expenses, Depreciation, and Depiction Calculated in Same Manner as Used by Commission and Set Out In Their Opinion and Order Dated September 13th, 1933)

For Periods Shown Below

		Tw	Twelve Months Ended	p	
Gross Revenues	December 31st, 1931	December 31st, 1932	June 30th, 1933	December 31st, 1933	March 31st, 1934
Gas Sales Miscel. Operating Revenues Other Non-Operating Revenues	\$7,903,744.51 1,631.35 36,610.96	. \$7,497,578.33 1,491.98 20,326.95	\$7,191,752.46 1,403.52 40,435.07	\$6,573,137.46 1,442.91 35,639.48	\$6,775,122.48 1,596.78 36,503.31
Total	\$7,941,986.82	\$7,519,397.26	\$7,233,591.05	\$6,610,219.85	\$6,813,222.57
Deductions from Gross Revenues					
Gas Purchased.	\$1,456,830.39	· 18	-	185.	160
Production System Expense		68,634	442	850	.770
Jathering System Expense		135,110.	747	326.	713.
Transmission System Expense		454,086.	598.	520.	114.
Compressor Station Expense	447,292.41	358,402.	336,125.79	338,433.01	346,306.81
New Business Expense		87,528.	725	793.	308
General Expense		689,811.	837	501.	793
Uncollectible Bills		5,399.	794	530	475.
Taxes—Other than Federal.		343,693	693		
Management Fees and Expenses					
Regulatory Commission Expense	17,695.86	422	680	490	17,490.09
Dry Hole Expense.	453	635.	635	464	464.
Cancelled and Surrendered Leases	99,140.73	137,446.63	137,446.63	172,676.50	172,676.50
Total	\$4.176.826.58	\$3 610 733 75	\$3 573 022 08	\$3 612 250 47	<b>\$3</b> 622 060 07

Available for Depreciation, Depletion, Federal Income Tax, and Return. Depreciation and Depletion	\$3,765,160.24 983,698.43	\$3,908,663.51 987,598.35	\$3,660,568.97 997,629.80	\$2,997,969.38 1,000,017.75	\$3,191;162.50 1,001,440.56	
Available for Federal Income Tax and Return Federal Income Tax	\$2,781,461.81 211,689.58	\$2,921,065.16 240,990.65	\$2,662,939.17 211,018.55	\$1,997,951.63 124,697.16	\$2,189,721.94 153,646.28	
Available for Return	\$2,569,772.23	\$2,680,074.51	\$2,451,920.62	\$2,451,920.62 \$1,873,254.47	\$2,036,075.66	
See Rate Base Calculations in this report.) Available for Return Per Cent of Rate Base		\$46,246,617.53 \$46,520,137.06 \$46,972,794.61 \$47,180,440.21 \$47,192,765.79 5.56 5.56 5.76 5.76	\$46,972,794.61	\$47,180,440.21	\$47,192,765.79	

Defendant's Exhibit No. 13—Continued	3—Continued		•
ol. 4007]	sany		
Public Service Operations	tions		
Comparative Statement of Revenues and Expenses (Based on 32¢ Domestic Gate Rate)	ues and Expenses		
Twelve Months Ended December 31st, 1931	ber 31st, 1931		
fross Revenues  Gas Sales  Misc'l. Operating Revenues  Other Non-Operating Revenues	As Per Company Exhibits \$9,265,639,45 1,631.35 35,464.07	Commission Adjustments \$1,361,894.94†	As Per Commission \$7,903,744.51 1,631.35 36,610.96
Total	\$9,302,734.87	\$1,360,748.05	\$7,941,986.82
Case Purchased Gas Purchased Production System Expense Production System Expense Gathering System Expense Transmission System Expense Compressor Station Expense New Business Expense General Expense Uncollectible Bills Taxes—Other than Federal Management Fees and Expenses Regulatory Commission Expense Dry Hole Expense Cancelled & Surrendered Leases	\$1,456,830.39 90,669.82 140,961.09 584,115.01 447,292.41 126,125.98 731,163.59 4,369.63 399,008.95 91,375.38 17,695.86 65,871.56 239,230.96	91,375.38†	\$1,456,830.39 90,6639.82 140,961.09 584,115.01 447,292.41 126,125.98 731,163.59 4,369.63 399,008.95 79,453.12 99,140.73
Total	. \$4,394,710.63	\$217,884.05	\$4,176,826.58
•			

Available for Depreciation, Depletion, Federal Income Tax and Return	\$4,908,024.24	\$1,142,864.00†	\$3,765,160.24 983,698.43
Available for Federal Income Tax and Return.			\$2,781,461.81 211,689.58
Available for Return			\$2,569,772.23
(As set out in findings by Commission. See Rate Base Calculation in this Report).		1	\$46,246,617.53
Available for Return Per Cent of Rate Base.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$	5.56
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No. 1
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[fol: 4008] Lone Si	Lone Star Gas Company			
Public	Public Service Operations			
Comparative Statement of Revenues and Expenses (Based on 32¢ Domestic Gate Rate)	ative Statement of Revenues and E (Based on 32¢ Domestic Gate Rate)	and Expenses Rate)		
Twelve Months Ended December 31st, 1932	Ended December	31st, 1932		
Gross Revenues Gas Sales Misc'l. Operating Revenues Other Non-Operating Revenues		As Per Company Exhibits \$8,829,713.37 1,491.98 12,192.19	Commission Adjustments 81,332,135.04† 8,134.76	As Per Commission, \$7,497,578.33 1,491.98 20,326.95
Total		\$8,843,397.54	\$1,324,000.28†	\$7,519,397.26
Deductions from Gross Revenues				
Gas Purchased Production System Expense		\$1,177,334.48	\$70,227.30	561
Gathéring System Expense. Transmission System Expense		135,110.30		110.
Compressor Station Expense		358,402.61		986
General Expense		87,528.94 689,811.48		528.
Uncollectuble Bills  Taxes—Other than Federal		5,399.35		5,399.3
Management Fees & Expenses Regulatory Commission Expense		87,197.87	87,197.87	010,000.00
Dry Hole Expense Cancelled & Surrendered Leases		14,288.55	56,347.38	12, 422.54
The state of the s		255,829.03	118,382.40	137,446.63
Total		\$3,841,055.81	\$230,322.06†	\$3,610,733.75

Available for Depreciation, Depletion, Federal Income Tax and Return	\$5,002,341.73 \$1,0	\$1,093,678.22	\$3,908,663.51
Depreciation and Deprecion			901,000,00
Available for Federal Income Tax and Return			\$2,921,065.16
Federal Income Tax			240,990.65
Available for Return			\$2,680,074.51
(As set out in findings by Commission. See Rate Base Calculation in this			
Report			546,520,137.06
Per Cent of Rate Base			5.76

† Red in copy.

Lone Star Gas Company Public Service Operations	Comparative Statement of Revenues and Expenses (Based on 32¢ Domestic Gate Rate) Twelve Months Ended June 30th, 1933
Lone ?	Comparative States (Based on 3 Twelve Mont

Groes Revenues Gas Sales Misc'l. Operating Revenues Other Non-Operating Revenues	As Per Company Exhibits \$8,455,136.94 1,403.52 30,423.69	Commission Adjustments \$1,263,384.48† 10,011.38	As Per Commission \$7,191,752.46 1,403.52 40,435.07
Total	\$8,486,964.15	\$1,253,373.10†	\$7,233,591.05
Deductions from Gross Revenues Gas Purchased Production System Expense. Gathering System Expense. Transmission System Expense Compressor Station Expense New Business Expense General Expense. Uncollectible Bills Taxes—Other than Federal Management Fees and Expenses Regulatory Commission Expense. Dry Hole Expense. Cancelled & Surrendered Leases	\$1,130,214.01 76,442.91 127,747.99 434,598.91 336,125.79 89,725.16 696,837.61 4,794.61 363,693.30 83,573.88 108,735.10 15,747.35	\$89,669.36 83,573.884 93,645.234 54,888.58 71,305.214	\$1,219,883.37 76,422.91 127,747.99 434,598.91 336,125.79 89,725.16 696,837.61 4,794.61 363,693.30 15,089.87 70,635.93
Total	\$3,676,988.46	\$103,966.38	\$3,573,022.08

Available for Depreciation, Depletion, Federal Income Tax and Return	\$4,809,975.69	\$1,149,406.72†	\$3,660,568.97 997,629.50	
Available for Federal Income Tax and Return.	6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		\$2,662,939.17 211,018.55	
Available for Return			\$2,451,920.62	
Rate Base: (As set out in findings by Commission. See Rate Base Calculation in this Report).		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$46,972,794.61	
Available for Keturn Per Cent of Rate Base.			5.22	
† Red in copy.				

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Defendant's Exhibit No. 13—Continued	Continued		
4010] Lone Star Gas Company			
Public Service Operations			
Comparative Statement of Revenues and Expenses (Based on 32¢ Domestic Gate Rate)	nd Expenses Rate)		
Twelve Months Ended December 31st, 1933	Hst, 1933		,
s Revenues Gas Sales. Misc'l. Operating Revenues. Other Non-Operating Revenues.	As Per Company Exhibits \$7,688,724.10 1,442.91 34,001.49	Commission Adjustments \$1,115,586.64† 1,637.99	As P Commis \$6,573,1
Total	\$7,724,168.50	\$1,113,948.65†	\$6,610,2
loctions from Gross Revenues  Gas Purchased  Production System Expense  Gathering System Expense  Transmission System Expense	\$1,086,587.44 86,850.34 131,326.29	\$95,598.22	\$1,182,1 86,8 131,3

Oss Revenues Gas Sales Misc'l. Operating Revenues Other Non-Operating Revenues	As Per Company Exhibits \$7,688,724.10 1,442.91 34,001.49	Commission Adjustments \$1,115,586.64† 1,637.99	As Per Commission \$6,573,137.46 1,442.91 35,639.48
Total	\$7,724,168.50	\$1,113,948.65†	\$6,610,219.85
ductions from Gross Revenues			
Gas. Purchasad.		\$95,598.22	185
Production System Expense	850		86,850.34
Cathering System Expense.	326		326.
I ransmission System Expense	220		520
Compressor Diagnon Expense	433		433
New Duriness Expense	793		793.
Ureneral Expense	200		501
Tares—Other than Rederal	530		530
Management Fees & Expense	75.940.60	946	476
Regulatory Commission Expense.	792	49,302.30+	490
Dry Hole Expense	7	759	68,464.51
Cancelled & Surrendered Leases.	629	953	929
Total	\$3,608,088.58	\$4,161.89	\$3,612,250.47

vailable for Depreciation, Depletion, Federal Income Tax and Return	\$4,116,079,92	\$1,118,110.54†	\$2,997,969.38 1,000,017.75
vailable for Federal Income Tax and Return.			. \$1,997,951.63 124,697.16
vailable for Return			\$1,873,254.47
(As set out in findings by Commission. See Rate Base Calculation in this report).			\$47,180,440.21
lvailable for Keturn Per Cent of Rate Base.			3.97
† Red in copy.			

[fol. 4011]	Lone Star Gas Company			
	Public Service Operations	<b>2</b>		
3	Comparative Statement of Revenues and Expenses (Based on 32¢ Domestic Gate Rate)	and Expenses Rate)		
	Twelve Months Ended March 31st, 1934	lst, 1934		
Gross Revenues Gas Sales Misc'l. Operating Revenues Other Non-Operating Revenues		As Per Company Exhibits \$7,926,274.88 1,596.78 34,892.25	Commission Adjustments \$1,151,152.40† 1,611.06	As Per Commission \$6,775,122.48 1,596.78 36,503.31
Total		\$7,962,763.91	\$1,149,541.34	\$6,813,222.57
Deductions from Gross Revenues Gas Purchased		\$1,096,156.08	\$102,004.55	\$1,198,160.63
Production System Expense. Gathering System Expense.		89,077.98		89,077.98
Transmission System Expense Compressor Station Expense		426, 114.97		426, 114.97
New Business Expense General Expense		101,308.68		101,308.68
Uncollectible Bills.  Taxes—Other than Federal.		6,475.73		6,475.73
Management Fees and Expenses Regulatory Commission Expense		56,204.18	38,714.09	17,490.09
Cancelled & Surrendered Leases		169,362.09	3,314.41	08,404.51 172,676.50
Total		\$3,583,322.42	\$38,737.65.	\$3,622,060.07
		The same of the sa	Contraction of the last of the	The state of the s

	Available for Depreciation, Depletion, Federal Income Tax and Return	\$4,379,441.49	\$1,188,278.99†	
	Depreciation and Depletion.			
	Available for Federal Income Tax and Return.			
14	Federal Income Lax			
3—	Available for Return			
-3:	Co Rate Base:		0	
104	(As set out in findings by Commission. See Rate Base Calculation in this			
1	Report)			
	Available for Return, Per Cent of Rate Base			
	T Ked in copy.	٠		

\$3,191,162.50 1,001,440.56 \$2,189,721.94 153,646.28

\$2,036,075.66

\$47,192,765.79 4.31.

## [fol. 4012] Rate Base Calculations

Calculations for this section of report are the same as for Section No. 1. For detail please see page Nos. 10-13, inclusive.

## [fol. 4013] Depreciation and Depletion Allowances

Calculations for this section of report are the same as for Section No. 1. For detail please see Pages 14 and 15.

Federal Income Tax Calculations

[fol. 4014] Federal Income Tax Calc	culations	
Twelve Months Ended December 31st, 1931  Amount Available for Federal Income Tax and Return  Less—Interest Charges	\$2,781,461.81	
Balance—Subject to Federal Income Tax Federal Income Tax Rate Federal Income Tax	\$1,764,079.87 12%	\$211,689.58
Twelve Months Ended December 31st, 1932  Amount Available for Federal Income Tax and Return  Less—Interest Charges	\$2,921,065.16	
Balance—Subject to Fed. Income Tax Foderal Income Tax Rate. Federal Income Tax	\$1,752,659.30 13.75%	<b>\$240</b> ,990.65
Twelve Months Ended June 30th, 1933  Amount Available for Federal Income Tax and Return Less—Interest Charges	\$2,662,939,17	
Balance—Subject to Federal Income Tax Federal Income Tax Rate Federal Income Tax	\$1,534,680.35 13.75%	<b>\$</b> 211,018.55
Twelve Months Ended December 31st, 1933  Amount Available for Federal Income Tax and Return  Less—Interest Charges	\$1,997,951.63	
Balance—Subject to Federal Income Tax Federal Income Tax Rate Federal Income Tax	\$906,888.43 13.75%	<b>\$</b> 124,697.16
Twelve Months Ended March 31st, 1934  Amount Available for Federal Income Tax and Return  Less—Interest Charges	\$2,189,721,94	
Balance—Subject to Federal Income Tax. Federal Income Tax Rate Federal Income Tax.	13.75%	\$153,646.28

## Section No. 4

Basis of Calculations Included in Schedules Incorporated in This Section of Report

## 1. Gas Sales:

Based on 32¢ Domestic Gate Rate.

## 2. Rate Base:

As found by Railroad Commission at December 31st, 1931, and set out in their Opinion and Order dated September 13th, 1933, plus net additions at cost.

## 3. Operating Expenses:

Based on findings by Railroad Commission and as set out in their Opinion and Order dated September 13th, 1933, with the exception that additional gas purchase expense allowed by Commission has been eliminated from schedules. The reason for this elimination of expense is due to the inclusion of property formerly owned and operated by Meridian Gas Company being included in Rate Base as a net addition to property.

## 4. Depreciation and Depletion:

Based on findings by Railroad Commission and as set out in their Opinion and Order dated September 13th, 1933.

## 5. Federal Income Tax:

Based on amount available for return as shown in schedules, less interest charges paid by the Company; the remainder being used as the basis of calculation at the prevailing rate.

Defendant's Exhibit No. 13—Continued Lone Star Gas Company

[fol. 4016]

(Based on 32¢ Domestic Gate Rate and Operating Expenses, Depreciation, and Depletion Calculated in Same Manner as Used by Commission and Set Out In Their Opinion and Order Dated September 13th, 1933) Statement of Revenues, Expenses, and Amount Available for Return Public Service Operations

Rate Base-As Found by Commission at December 31st, 1931, Plus Net Additions At Cost.

131,713.95 426,114.97 346,306.81 101,308.68 703,793.31 86,775,122.48 1,596.78 \$6,813,222.57 March 31st, 986,587.44 86,850.34 131,326.29 431,520.56 338,433.01 99,793.94 6,530.77 360,476.91 December 34st, \$6,573,137.46 \$6,610,219.85 35,639.48 1,442,91 Twelve Months Ended \$7,191,752.46 1,403.52 40,435.07 214.01 442.91 747.99 598.91 125.79 725.16 837.61 794.61 \$7,233,591.05 June 30th, 127 \$7,497,578.33 1,491.98 20,326.95 December 31st, 838829828 \$7,519,397.26 68,634. 135,110. 454,086. For Periods Shown Below \$7,903,744.51 1,631:35 36,610.96 90,669.82 140,961.09 5584,115.01 447,292.41 126,125.98 731,163.59 4,369,63 December 31st, 830.39 669.82 961.09 115.01 \$7,941,986.82 Other Non-Operating Revenues. Gas Sales.
Misc'l. Operating Revenues... Production System Expense... Gathering System Expense.... Transmission System Expense. Deductions from Gross Revenues Gas Purchased..... Total.... Gross Revenues

6,475.73

434, 336, 89

358,402. 87,528. 689,811.

5,399.

17,490.09 68,464.51 172,676.50

68,464.51 172,676.50

15,089.87 70,635.93 137,446.63

12,422.54 70,635.93 137,446.63

17,695.86 79,453.12 99,140.73

Cancelled and Surrendered Leases Regulatory Commission Expense Dry Hole Expense. Management Fees and Expenses.

Total

axes—Other than Federal....

Uncollectible Bills..... Jeneral Expense.....

Compressor Station Expense New Business Expense.... 17,490.09

\$3,520,055.52

\$3,516,652.25

\$3,483,352.72

\$3,540,506.45

\$4,176,826.58

\$3,293,167.05 1,025,472.71	\$2,267,694.34 164,367.49	\$2,103,326.85	\$46,246,617:53 \$48,504,299.60 \$48,393,005.16 \$48,306,893.96 \$48,342,628.99 5.17 5.56 4.01 4.01
\$3,093,567.60	\$2,070,006.97	\$1,935,402.20	\$48,306,893.96
1,023,560.63	134,604.77		4.01
\$3,750,238.33	\$2,722,944.13	\$2,503,674.90	\$48,393,005.16
1,027,294.20	219,269.23		5.17
\$3,978,890.81 1,029,067.35	. \$2,949,823.46 244,944.92	\$2,569,772.23 \$2,704,878.54 \$2,503,674.90	\$48,504,299.60
\$3,765,160.24	\$2,781,461.81	\$2,569,772.23	\$46,246,617:53
983,698.43	211,689.58		5.56
Available for Depreciation, Depletion, Federal Income Tax, and Return.  Depreciation and Depletion.	Available for Federal Income Tax and Return Federal Income Tax.	Available for ReturnRate Base—As found by Commission at Dec. 31st,	

Rate Base—As Found by Commission at December 31st, 1931—Plus Net Additions at Cost \$9,265,639.45 1,631.35 35,464.07 \$9,302,734.87 pany Exhibits As Per Com-Comparative Statement of Revenues and Expenses Twelve Months Ended December 31st, 1931 (Based on 32¢ Domestic Gate Rate) Public Service Operations Lone Star Gas Company Other Non-Operating Revenues Gas Sales.
Misc'l. Operating Revenues... Gas Purchased
Production System Expense
Gathering System Expense
Transmission System Expense Deductions From Gross Revenues Compressor Station Expense. Gross Revenues [fol. 4017]

126, 125.98 731, 163.59 4, 369.63 399,008.95 90,669.82 140,961.09 584,115.01 447,292.41 126,125.98 731,163.59 4,369.63 17,695.86 79,453.12 99,140.73 \$7,941,986.82 \$4,176,826.58 36,610.96 \$7,903,744.51 Commission As Per 13,581.56 \$1,360,748.05 \$217,884.05 \$1,361,894.94 1,146.89 Adjustments Commission \$4,394,710.63 399,008. 91,375. 17,695.8 65,871. Regulatory Commission Expense Dry Hole Expense Management Fees & Expenses Faxes—Other Than Federal New Business Expense... General Expense..... Uncollectible Bills.... Total.

Available for Depreciation, Depletion, Federal Income Tax and Return	\$4,908,024.24	\$1,142,864.00†	\$3,765,160.24 983,698.43
Available for Federal Income Tax and Return.			\$2,781,461.81 211,689.58
r Return.			\$2,569,772.23
As Found by Commission at December 31st, 1931—Plus Net addition at Cost. (See Rate Base Calculation included in this report)	,		\$46,246,617.53 5.56
† Red in copy.			

Comparative Statement of Revenues and Expenses (Based on 32¢ Domestic Gate Rate) Public Service Operations Lone Star Gas Company

[fol. 4018]

As Per Company Exhibits pany Exhibits \$8,829,713.37 \$1,491.98	As Per Company Exhibits \$8,829,713.37 11,491.98	I welve Months Ended December 31st, 1932	2001		
\$8,829,713.37 1,491.98	88,829,713.37 1,491.98 12,192.19		any Exhibits	Commission Adjustments	
86.194,1	1,491.98		8,829,713.37	\$1,332,135.04	
	07.707.70		1,491.98	Q 124 76	

\$7,497,578.33 1,491.98 20,326.95

As Per Commission

\$7,519,397.26

Gas Sales. Misc'l. Operating Revenues. Other Non-Operating Revenues.	\$8,829,713.37 1,491.98 12,192.19	\$1,332,135.04† 8,134.76
Total	* \$8,843,397.54	\$1,324,000.28
Deductions from Gross Revenues	*	
Gas Purchased	\$1,177,334.48	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Production System Expense	68,634.52	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Gathering System Expense	135,110.30	
I ransmission System Expense	454,086.37	
Compressor Nation Expense	358,402.61	
New Duminess Expense	87,528.94	
Translating Dill	689,811.48	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Tayon Other than Dadonel	242,609,30	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Management Fees & Expense	87, 197, 87	87.197.87+
Regulatory Commission Expense	163,739.01	151,316.47†
Dry Hole Expense	14,288.55	. 56,347.38
Canceled & Surrendered Leases	255,829.03	118,382.40

\$1,177,334.48 68,634.52 135,110.30 454,086.37 358,402.61 87,528.94 689,811.48 5,399.35 343,693.30

12,422.54 70,635.93 137,446.63

\$3,540,506.45

\$300,549.36†

\$3,841,055.81

Total.

Available for Depreciation, Depletion, Federal Income Tax and Return	\$5,002,341.73	\$1,023,450.92†	\$3,978,890.81 1,029,067.35	
tvailable for Federal Income Tax and Return			\$2,949.823.46 244,944.92	
tvailable for Return.		•	\$2,704,878.54	
tate Base:  As found by Commission at December 31st, 1931—Plus Net Addition at Cost. (See Rate Base Calculation included in this report)  Lyailable for Return Per Cent of Rate Base			\$48,504,299.60 5.57	
† Red in copy.				

,			0		ditions at Cost .	
Defendant's Exhibit No. 13—Continued		. Lone Star Gas Company	Public Service Operations	Comparative Statement of Revenues and Expenses (Based on 32¢ Domestic Gate Rate)	Rate Base—As Found by Commission at December 31st, 1931—Plus Net Additions at Cost.	Twelve Months Paded Ives 90th 1099
	• :				te Base-A	
			100		Ra	
	er.					
	[6					

OHDO DODGE CHARLES OF THE PARTY	0001 170		
Gross Revenues Gas Sales Misc'l. Operating Revenues Other Non-Operating Revenues	As Per Company Exhibits \$8,455,136.94 1,403.52 30,423.69	Commission Adjustments \$1,263,384,48† 10,011.38	As Per Commission \$7,191,752.46 1,403.52 40,435.07
Total	\$8,486,964.15	\$1,253,373.10†	\$7,233,591.05
Deductions from Gross Revenues  Gas Purchased Production System Expense Gathering System Expense Transmission System Expense Compressor Station Expense New Business Expense General Expense Uncollectible Bills Taxes—Other than Federal Management Fees & Expense Regulatory Commission Expense	\$1,130,214,01 76,442,91 127,747,99 434,598,91 336,125,79 89,725,16 696,837,61 4,794,61 363,693,30	52	214 442 598 598 125 725 725 693
Dry-Hole Expense Canceled & Surrendered Leases	747	54,888.58 71,305.21	15,089.87 70,635.93 137,446.63
Total	\$3,676,988.46	\$193,635.74	\$3,483,352.72

Available for Depreciation, Depletion, Federal Income Tax and Return	\$4,809,975.69	. \$1,059,737.36†	\$3,750,238.72
			1,021,231.20
Available for Federal Income Tax and Return			\$2,722,944.13
rederal Income Lax			219,269.23
Available for Return	***		\$2,503,674.90
Rate Base:			
As found by Commission at December 31st, 1931-Plus net Addition at			
Amilable for Detroit Des Calculation included in this report)			\$48,393,005.16
Available for Including Fel Cent of Mare Dage.			5.17
† Red in copy.			

[fol. 4020]

Lone Star Gas Company Public Service Operations

Comparative Statement of Revenues and Expenses (Based on 32¢ Domestic Gate Rate)

Rate Base-As Found by Commission at December 31st, 1931-Plus Net Additions at Cost

I welve Months Ended December	31st, 1933	٠	
Gross Revenues Gas Sales Misc'l. Operating Revenues Other Non-Operating Revenues	As Per Company Exhibits \$7,688,724.10 1,442.91 34,001.49	Commission Adjustments \$1,115,586.64† 1,637.99	As Per Commission \$6,573,137.46 1,442.91 35,639.48
Total	\$7,724,168.50	\$1,113,948.65†	\$6,610,219.85
Deductions from Gross Revenues Gas Purchased Production System Expense	587.		\$1,086,587.44 86,850.34
Gathering System Expense Transmission System Expense	326		131,326.29
New Business Expense General Expense	793. 501.		. 99, 793, 94 716, 501, 89
Uncollectible Bills.  Taxes—Other than Federal.  Manacement Fees & Expenses		75: 040 60+	6,530.77
Regulatory Commission Expense Dry Hole Expense Canceled & Surrendered Leases	66,792.39 18,704.52 188,629.92	49,302.30† 49,759.99 15,953.42†	17,490.09 68,464.51 172,676.50
Total	\$3,608,088.58	\$91,436.33†	\$3,516,652.25

Available for Depreciation, Depletion, Federal Income Tax and Return	\$4,116,079.92	\$1,022,512,32	\$3,093,567.60 1,023,560.63	
Available for Federal Income Tax and Return.			\$2,070,006.97	
Available for Return			\$1,935,402.20	
As found by Commission at December 31st, 1931—Plus net Addition at Cost. (See Rate Base Calculation included in this report).  Available for Return Per Cent of Rate Base.			\$48,306,893.96	
† Red in copy.				

Lone Star Gas Company	Public Service Operations Comparative Statement of Revenues and Expenses	(Based on 32¢ Domestic Gate Rate)	Rate Base—As Found by Commission at December 31st, 1931—Plus Net Additions at Cost	Twelve Months Ended March 31st, 1934	
[fol. 4021]					

T WEIVE INTOLLED STRUCK INTOLLED STRUCK TROP	180, 1804		
Gross Revenues Gas Sales Misc'l. Operating Revenues Other Non-Operating Revenues	As Per Company Exhibits \$7,926,274.88 1,596.78 34,892.25	Commission Adjustments \$1,151,152.40† 1,611.06	As Per Commission \$6,775,122.48 1,596.78 36,503.31
Total.	\$7,962,763.91	\$1,149,541.34	\$6,813,222.57
Deduction from Gross Revenues  Gas Purchased Production System Expense Gathering System Expense Transmission System Expense Transmission System Expense Compressor Station Expense New Business Expense General Expense Uncollectible Bills Taxes—Other than Federal Management Fees & Expenses Regulatory Commission Expense Dry Hole Expense Canceled & Surrendered Leases	\$1,096,156.08 89,077.98 131,713.95 426,114.97 346,306.81 101,308.68 703.793.31 6,475.73 360,476.91 77,110.16 56,204.18 19,221.57	77, 110.16 38,714.09 49,242.94 3,314.41	\$1,096,156.08 89,077.98 131,713.95 131,713.95 426,114.97 346,306.81 101,308.68 703.793.31 6,475.73 360,476.91 17,490.09 68,464.51
Total	\$3,583,322.42	\$63,266.90+	\$3,520,055.52

Available for Depreciation, Depletion, Federal Income Tax and Return	\$4,379,441.49	\$1,086,274.44†	\$3,293,167.05 1.025,472.71
Available for Federal Income Tax and Return. Federal Income Tax.			\$2,267,694.34
Available for Return			\$2,103,326.85
As found by Commission at December 31st, 1931—Plus Net Addition at Cost. (See Rate Base Calculation included in this report).  Available for Return, Per Cent of Rate Base			\$48,342,628.99
† Red in copy.			00:1

## [fol. 4022] Rate Base Calculations

Calculations for this section of report are the same as for Section No. 2. For detail please see pages 24 and 25.

## [fol. 4023] Depreciation and Depletion Allowance's

Calculations for this section of report are the same as for Section No. 2. For detail please see page Nos. 26-28, inclusive.

[fol	. 4024]	Federal Income Tax Calc	ulations			
Tw	Amount Available and Return	December 31st, 1931 of for Federal Income Tax	\$2,781,461 1,017,381	.81		
	Balance—Subject Federal Income T Federal Income T	to Federal Income Tax ax Rate	\$1,764,079	12%	\$211,689.58	
	Amount Available and Return	December 31st, 1932 e for Federal Income Tax arges	\$2,949,823 1,168,405	.46		
	Federal Income T	to Federal Income Taxax Rateax	13	.75%	\$244,944.92	-
Tw	and Return	l June 30th, 1933 e for Federal Income Tax arges	\$2,722,944	1.13		
	Federal Income T	to Federal Income Taxax Rateax	. 13	.75%	\$219,269.23	
Tw	Amount Available and Return	December 31st, 1933 e for Federal Income Tax	\$2,070,006	3.97 3.20		
•	Balance—Subject Federal Income T Federal Income T	to Federal Income Tax	\$978,943 13	.77 .75%	\$134,604.77	
Tw	elve Months Ended Amount Available and Return Less—Interest Ch	March 31st, 1934 e for Federal Income Tax	\$2,267,694 1,072,294	.34		
	Federal Income T	to Federal Income Tax ax Rate	. 13	.75%	\$164,367.49	)

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